

Agency	Comment No.	Document Title	Page #	Row # or Line #	Commenter Name	Comment	Type of Comment	Remarks / How Resolved (Reviewers: please provide your recommendation or resolution for the comment)	Response to Comment
EPA	79				EPA - EP	Global: Please Note that EPA is providing this input given the time available to us at this stage in the process to help with the EIS development process. We may have additional comments and recommendations to make during the review of the public DEIS.			BLM appreciates the review and looks forward to additional EPA review comments on the DEIS.
EPA	80				EPA - EP	Global: All of the comments below are recommendations and suggestions for the BLM's consideration, regardless of whether they specifically say "recommendation".			Comment noted.
EPA	81	Appendix O			EPA - AW	Recommend ensuring that Appendix O provides detailed project mitigation measures to allow for an evaluation of this project under Section 404 of the Clean Water Act. Request the opportunity to review and discuss mitigation opportunities to offset proposed impacts to aquatic resources to evaluate the project as a whole.			Appendix N provides detailed potential mitigation measures. Measures related to the Clean Water Act will be included and will be provided for review by the USACE and EPA. The USACE will be responsible for assuring compliance with CWA compliance during permitting.
EPA	82		ES-2	462	EPA-EP	Please add more information about the relationship between future formal mine proposals and constructing the road. Address whether any portion or phase of the road would be constructed before a specific mine has received all necessary permits and approvals.	Editorial		The detail requested is not appropriate for the Executive Summary. Additional information requested is presented in the introduction to Chapter 3. Details on the reasonably foreseeable timing of road and mine development is presented in Appendix H. Because no specific mine proposal has been presented, timing as to whether a mine would have all its permits prior to any portion of the road being constructed is not known.
EPA	83		ES-5	605	EPA-EP	Describe whether hunting would be formally restricted for safety reasons near the road either in place of or addition to hunters being "unwilling" to shoot toward the road.	Editorial		BLM does not have the authority to restrict hunting on non-BLM land. Hunting is not proposed to be formally restricted near the road. It is illegal under Alaska law to shoot across or from a road. This will be clarified in the EIS in Section 3.4.3, Recreation, and 3.4.7, Subsistence, but is too detailed for the executive summary. The reference to "unwilling" to shoot toward the road has been deleted in the executive summary.
EPA	84		ES-5	608	EPA-EP	Suggest deleting the phrase "Perceived or real changes due to the presence of the..." Suggest starting with "The road and mines...", and, change "affects" to "impacts" or "effects".	Editorial		Concur. Text has been revised.
EPA	85		ES-5	571	EPA—CE	Appendix H mentions that even with multiple best management practices in place, the impact of metal releases from ore being transported along the Red Dog access road is apparent for several miles away from the road. Given the large number of trucks transporting concentrated ore along this road for decades, we recommend that it be assumed that truck traffic/roadside releases will also be a source of elevated metal/metalloid concentrations to areas waterbodies and terrestrial ecosystems. We recommend that the DEIS use the information gained from Red Dog and scale-up the potential impacts from roadside releases assuming a much larger number of mine related truck traffic. We recommend that this paragraph include discussion of water quality impacts from fugitive releases of metals from the transport of concentrated ore along the roadway.	Critical/ Disagree		The containerized system that will be employed is different than the system used at Red Dog. Red Dog is not an appropriate proxy for the anticipated type or level metals release as they did not and still do not have the kind of sealed containers proposed for this route. To the extent that containers are not maintained or get damaged it is possible that materials could blow from the trucks, but again, not at the levels experienced at Red Dog. Information related to this response will be included in the EIS for clarification.
EPA	86		ES-5	578	EPA-cg	PDEIS text states, "...thought to be closer to already be closer to the thaw point." Delete "closer to already be"	Minor/ Suggestion		Concur. Text has been revised.
EPA	87		ES-6	613	EPA-EP	To give a sense of the scale of GAAR recreational trips, we suggest changing "many" to an estimated number i.e., number of recreations trips (per year)?	Editorial		The exact number of trips is not known. The impacts to GAAR are not subject to NEPA. The NPS EEA may have additional information.
EPA	88		ES-6	630	EPA-EP	Suggest replacing "identify" with "discuss" or "disclose".	Minor/ Suggestion		Concur. Text has been revised.
EPA	89		ES-6	630	EPA-EP	Suggest deleting "commitments". If no mitigation information for mining is discussed or disclosed, then it is implied that there are no commitments. The distinction matters because it may be appropriate to discuss in the EIS whether and how adequate mitigation is reasonably expected to be possible, while also acknowledging that getting to commitments is further down the road.	Editorial		Concur. Text has been revised.

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EPA	90		ES-6	631	EPA-EP	Suggest changing “insufficient details of that development are available at this time” to “details of that development are not sufficiently available at this time”	Minor/ Suggestion		Concur. Text has been revised.
EPA	91		ES-6	637	EPA-EP	Change “environmentally preferred” to “environmentally preferable” consistent with NEPA regs.	Factual Error		Concur. Text has been revised.
EPA	92		ES-6	635	EPA-EP	Recommend identifying the ‘preliminary environmentally preferable action alternative’ at the draft EIS stage or describing the criteria that the BLM will use to identify which alternative is environmentally preferable. Earlier disclosure of which alternative appears relatively least impactful or the criteria to be used helps facilitate meaningful public and agency involvement.	Editorial		Language was added to the executive summary related to BLM’s preferred alternative.
EPA	93	Chapter 1	1-2	69	EPA-EP	We recommend that the EIS includes a reference (to the specific key document and page or section) for the source of the statement that an “estimate of when mineral exploration and development in the District is anticipated to be completed”.	Critical/ Disagree		Reference to AIDEA’s application added to the sentence.
EPA	94	Chapter 1	1-3	93	EPA-EP	We recommend that BLM and the Corps work toward a shared purpose statement. The BLM’s is to provide “...access in support of mining...” The Corps’ overall purpose is to provide “...access for mining...”	Editorial		BLM and the USACE have coordinated on their purpose and need statements, and both agencies prefer to report their purpose and needs as written.
EPA	95	Chapter 1	1-3	82	EPA-EP	Indicate the page or section number for references to very large documents, including, importantly, to DOWL 2016. For example, we recommend referencing the page or section of DOWL 2016 which indicates that surface transportation access would help bring the high-value mineral resource areas into production?	Editorial		BLM has determined that citing to exact page numbers is not critical for the reader to find the material. No change made.
EPA	96	Chapter 1	1-4	123	EPA-EP	Suggest replacing “...(EPA) is a cooperating agency that has a role...and health impact assessment review” with “...(EPA) is coordinating as a cooperating agency in order to maximize use of available resources and special expertise and minimize duplication in those areas of overlapping responsibilities.” Language is from the BLM/EPA MOU.	Editorial		Concur. Text has been revised.
EPA	97	Chapter 1	1-6	210	EPA-EP	Suggest re-phrasing “Impacts of greatest concern” to something like ‘impacts of great concern’, or, to the extent it is true, ‘concerns related to subsistence resources were most frequently mentioned’. Altogether, it is unclear how “greatest concern” is determined.	Editorial		Text was revised. However, this was changed by BLM legal to ‘highest.’
EPA	98	Chapter 2	2-5	No line # in Chap 2	EPA-EP	In the Construction Phasing section, or elsewhere, we recommend the EIS indicate whether road construction would be likely to begin before a mine has received necessary permits and approvals.	Editorial		AIDEA has indicated a desire to use the road for mine exploration; therefore, it is possible that road construction could begin or be completed prior to a mine receiving all its permits and approvals. This has been clarified in Chapter 2 at the beginning of the Construction Phasing section: “Road construction likely would begin in support of mining exploration and would not be dependent on mine permits or approvals.”
EPA	99	Chapter 2	2-5	No line # in Chap 2	EPA-cg	PDEIS states “It is anticipated that access would be controlled similar to the Dalton Highway’s access to the North Slope oil fields” This is potentially misleading. The Dalton Highway is open to Deadhorse (414 miles) and only limits access to the oilfields at the very end of it. We recommend revising to emphasize that, while access control techniques will likely be similar to those found at the far end of the Dalton Highway, a key difference is that no portion of the Ambler road would be open for public use.	Minor/ Suggestion		Concur. Text has been revised.

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EPA	100	Chapter 2	2-5	No line # in Chap 2	EPA-cg	In Phases 1 and 2, the road will be a single-lane road with convoys being led in a single direction at a time. It would seem that there would have to be an area at the Dalton end of the road where trucks would congregate prior to heading out on the road. We recommend that the EIS consider and disclose whether trucks would need to stage in a holding area at either end of the road during construction or operations. If staging is potentially necessary, we recommend estimating the location and size of these potential staging areas	Minor/ Suggestion		AIDEA indicates that the mining companies operating on the road would be responsible for such a staging area. BLM agrees that such staging area is reasonably foreseeable. The staging would also need to occur to recombine loads from double trailers on the Ambler Road to single trailers on the Dalton Highway even during phase 3. Because this staging area would be built by others, and is reasonably foreseeable, it has been added to Appendix H. A paragraph has been added at the end of the Operations section to address traffic patterns by phase and to include the need for a staging area.
EPA	101	Chapter 2	43502	No line # in Chap 2	EPA-cg	The text states that, "Fuel storage would be in double-wall tanks that..." We suggest that the text mention whether double walls serve as secondary containment for fuel to reduce spills.	Minor/ Suggestion		Concur. Text has been revised.
EPA	102	Chapter 3	3-x	Map 3-27	EPA - AW	We recommend that the EIS address opportunities for taking advantage of existing infrastructure, for example, discuss whether it is possible to take advantage of any existing roads, such as a portion of the existing minor road between Hughes and Tanana for Alternative C or in other areas where an existing road need only be upgraded.	Minor/ Suggestion		BLM considered the use of existing roads in the development of Alternative C. The road from Kobuk past Bornite has been assumed to be used and upgraded in Alternative C. Many of the "minor road" lines shown on Map 3-27 are winter trails, easements without a trail, or are no longer in existence. Engineers considered these routes but due to grades, land ownership, or other constraints found them not reasonable.
EPA	103	Chapter 3	3-x	Map 3-27	EPA - AW	We recommend that the EIS address opportunities for taking advantage of existing infrastructure, for example, discuss whether it is possible to take advantage of any existing roads, such as a portion of the existing minor road between Hughes and Tanana for Alternative C or in other areas where an existing road need only be upgraded.	Minor/ Suggestion		N/A (duplicate of Comment 102)
EPA	104	Chapter 3	3-x	Map 3-27	EPA - AW	We recommend including additional available information regarding the potential RS 2477 trail in the DEIS that may parallel proposed alternatives. Only reference beyond this map seems to be in App G, Unique Comment # 107 (p.13). We suggest including	Critical/ Disagree		Concur. Information added.
EPA	105	Chapter 3	3-x	Map 3-29	EPA - AW	We recommend providing a clarification in Appendix G about why a portion of this existing road could not be used. For example, discuss whether it would be possible to utilize existing road infrastructure south of Bettles and Evansville (avoiding direct connection to the communities; Map 3-27) and also cross only the Koyukuk River, instead of both the N. Fork Koyukuk River and the John River, then connect to the Dalton? It is not clear if community avoidance extends to avoiding this road? Existing infrastructure that may be upgraded to supporting this project may provide opportunities to reduce impacts to aquatic resources, in compliance with the Clean Water Act 404(b)(1) Guidelines and 404 permitting process.	Minor/ Suggestion		The comment and columns to the left callout both Map 3-27 and Map 3-29. It appears that Map 3-27 is the one intended. "This existing road" in the comment is not readily apparent; based on context, it appears the existing winter road southeast of Bettles is the issue. Page 29 of Appendix G discusses the Original Brooks East route and why it was not carried forward for detailed analysis in the EIS. Community impacts and objections are the stated primary reasons, along with its status as largely duplicative of the Alternative A/B alignment. It would have used the general route of the Bettles/ Evansville winter road, but it crossed Evansville village corporation land, and the corporation indicated it would not accept a road across its lands. For this reason, it appears to be a non-viable route at its eastern end. While clarification may have been useful, the document is not inaccurate. Because Appendix G is a finalized document, no modification has been made.
EPA	106	Chapter 3	3-x	Map 3-9	EPA - AW	This map gives a good broad overview of the wetlands in the region, but it is insufficient for assessing wetland areas impacted by proposed development of the road and associated infrastructure, and the recommended avoidance, minimization and mitigation of those wetlands impacts. We recommend providing additional separate figures displaying mapped wetlands, streams, and the locations of proposed culverts and bridges at a much closer scale than provided currently by Map 3-9.	Critical/ Disagree		Wetland impact acreage calculations are done on a more detailed desktop wetland delineation. BLM contemplated making detailed mapbooks of the alternatives showing the more detailed wetland mapping. However, these mapbooks would likely be over 100 pages per alternative. BLM discussed the scale of wetland mapping with the USACE. USACE confirmed that presenting the impact calculations tabularly with the broader wetland map showing the area would suffice for their NEPA review. Additional detail will be required of the applicant during permitting. Once a decision is made, the BLM intends to provide to the public and agencies a mapbook with a higher level of detail for that alternative.

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EPA	107	Chapter 3	3-x	Map 3-17	EPA - AW	Maps 3-17 and 3-18 are helpful for an overview of anadromous and non-salmon fish in the proposed project areas, but insufficient for assessing and evaluating impacts from the project to fish-bearing streams and recommended avoidance, minimization and mitigation . Recommend providing additional figures zoomed in to a closer scale of the proposed project areas.	Critical/ Disagree		The maps are presented at a scale that is sufficient to depict the known information for a NEPA level analysis. Additional detail and mapping will be required of the applicant during ADF&G fish habitat permitting. BLM has included a stipulation that additional fish mapping be completed where fish presence information is not known.
EPA	108	Chapter 3	3-1	39	EPA-EP	Recommend re-writing "...development anticipated to use the road in the decades following its completion,..." with something like 'development anticipated to use the road during the 50 year ROW'.	Critical/ Disagree		Concur. Text has been revised.
EPA	109	Chapter 3	3-6.	226	EPA-EP	We recommend that the DEIS include site-specific information on current and future thaw subsidence risk. We also recommend the DEIS's estimation of environmental impacts (such as those from materials sites) reflect a design which mitigates for the effects of current and future thaw subsidence risk. Available information to inform the integration of thaw subsidence into project design includes, for example, Hong, Perkins and Trainor's 2014 paper "Thaw Settlement Hazard of Permafrost Related to Climate Warming in Alaska" (Accessed 6/7/19 at: http://pubs.aina.ucalgary.ca/arctic/Arctic67-1-93.pdf). We also recommend consulting with experts at the Alaska Center for Climate Assessment and Policy. We are concerned about potential environmental impacts arising from the likely needs to mitigate thaw subsidence risk for the road.	Critical/ Disagree		Site-specific information on current and future thaw subsidence risk does not exist. The applicant has committed to a geotechnical investigation to further evaluate permafrost risk and to design the project to take that risk into consideration. Information from your cited document has been reviewed and appropriately incorporated into the EIS.
EPA	110	Chapter 3	3-7.	268	EPA-EP	Add that future spur roads will be engineered to anticipate potential infrastructure damage from thaw subsidence. We also recommend that estimates of sand and gravel resource needs should reflect mitigation of thaw subsidence risk.	Editorial		Spur roads to material sites and air strips to be built by AIDEA will be engineered to anticipate potential thawing. Spur roads built by others are reasonably foreseeable, but BLM does not have the authority to provide design commitments on those roads - they will need to undergo their own NEPA and permitting evaluation. It is not possible to estimate where and by how much the infrastructure may subside. Climate change is reasonably foreseeable and the potential for subsidence is discussed. Qualitative information has been included in Appendix H to indicate that gravel will be needed to address subsidence. A stipulation has been added in Appendix N at 3.2.1, #8, regarding monitoring and maintenance following construction to stay ahead of any thawing/subsidence risk.
EPA	111	Chapter 3	3-8.	302	EPA-EP	Revise sentence to include the following addition in italics, "The current and future characteristics of subsurface soils and final road design dictate the volume and quality of material resources required for road construction." By 'current and future characteristics of subsurface soils', we are referring to permafrost thaw subsidence risk, which should be accounted for in estimates for material resource needs.	Editorial		Revised as suggested. Additional information added to address comments on permafrost thaw and subsidence risk made elsewhere in EPA comments.
EPA	112	Chapter 3	3-8.	320	EPA-EP	Include in the EIS or an appendix an analysis of the project cost implications of the House Bill 258, Natural Occurring Asbestos requirement, to pave or cap roads with materials free from measurable NOA. We are concerned that the EIS states that it is not currently known if there are sufficient volumes of materials clean of NOA. We recommend that the EIS discuss how AIDEA will adhere to the requirement to pave the road, or cap it with materials free from NOA if paving is cost prohibitive. If there is an exemption process for House Bill 258, we recommend that this also be discussed in the EIS.	Minor/ Suggestion		Additional costs related to NOA is an important unknown for this EIS, because the extent of NOA is unknown. Added definition of NOA per Alaska Statutes in 3.2.1, and clarification of HB 258 in 3.2.2 (Road Impacts). HB 258 essentially is an exemption: It allows the use of materials with more than 0.25% asbestos, and provides immunity for those who supply and use the materials. Text has been added to Appendix N, Section 3.2.7., Air Quality, to describe minimums for how the road would need to be constructed if using NOA materials. While paving is not assumed, use of non-NOA top surface is. These stipulations are subject to revision based on comments and further analysis. Additional geotechnical investigation would be done during project design.

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EPA	113	Chapter 3	3-8.	330	EPA-EP	Revise the sentence "It is anticipated that these issues would be mitigated through specific material site mining plans" to something like "It is anticipated that mitigation for impacts from material sites would be included in specific material site mining plans." The point here is that it is only true -- barring substantial additional info - that mitigation will be included in material site mining plans. The likely effectiveness of that mitigation cannot be assumed without supporting information. To suggest that the mitigation will be adequate would require discussion of the likelihood of implementation and the likelihood of effectiveness at mitigating for project impacts.	Critical/ Disagree		Concur. Text has been revised.
EPA	114	Chapter 3	3-8.	331	EPA-EP	Revise/ potentially delete the "Without appropriate mitigation..." sentence. Suggest replacing with something like "The aim of mitigation is to avoid, minimize and potentially compensate for unavoidable impacts." The sentence suggests that appropriate mitigation will eliminate permafrost degradation and soil erosion. Instead, it is only true that mitigation has the aim of reducing impacts	Critical/ Disagree		Concur. Text has been revised.
EPA	115	Chapter 3	3-8.	339	EPA-EP	Recommend mentioning House Bill 258 NOA immunity here as well. We recommend that the EIS discuss how the NOA immunity practices from House Bill 258 compare and relate to DOT&PF's interim guidance and whether they both require that roads with NOA be paved or capped with material with no measurable NOA. We also recommend disclosing the project cost implications of these requirements.	Editorial		See response to #112
EPA	116	Chapter 3	3-8.	343	EPA-EP	Disclose whether the estimated required borrow material for road construction under the action alternatives accounts for current and future thaw subsidence risk. For the purposes of estimating the environmental impacts of the project, including for Clean Water Act Section 404 permitting, agency decision makers and the public? should understand and be able to evaluate the extent of the project footprint. Given that the whole road is constructed of gravel, it is important to know how much gravel will be needed for the life of the road so that estimates of the size of the material sites will can be accurate. This all informs the impact evaluation and the discussion of project impact avoidance, minimization and mitigation.	Critical/ Disagree		Engineering and design mitigation to be undertaken by the applicant is intended to not exacerbate the thaw due to construction of the road and associated facilities. The EIS does already discuss that climate change is reasonably foreseeable and that roadway subsidence could occur. The amount and location of future thaw is not known and is unlikely to be knowable with any precision. AIDEA has overestimated the size of the material sites by roughly 2 times to account for unuseable material (like gravel that does not meet specifications). BLM considers this conservative estimate to be sufficient in disclosing potential footprint impacts of unknowns like extra gravel needed for thawing and subsidence. While quantifying the exact amount of gravel needed to deal with a changing Arctic climate is not reasonable, BLM has added additional qualitative discussion regarding the need for additional gravel use to address thaw and subsidence risk.
EPA	117	Chapter 3	3-8	329	EPA-EP	We recommend revising to include a more comprehensive list of resources affected by material sites. Add, for example, wetlands and aquatic resources (unless there is evidence to suggest that all of the material sites would avoid all wetland and aquatic resources), wildlife and birds, air quality (fugitive dust).	Editorial		Concur. Text has been revised.
EPA	118	Chapter 3	3-13	544	EPA - AW	The discussion of rivers, streams, creeks or other channels smaller than the large rivers specified is insufficient. The impacts to this group of aquatic resources has been largely underrepresented. Recommend including additional information on the number of channels crossed by project footprint alternatives and the environmental consequences (later section) of these impacts.	Critical/ Disagree		The number of smaller streams and channels to be crossed are disclosed in Appendix D, Table 17. References to that information have been added to the section. Additional discussion of the impacts has been included.
EPA	119	Chapter 3	3-14	582	EPA-cg	There are 4 rivers with segments meeting this definition in the project We suggest clarifying in the EIS that this definition refers to navigable waters not subject to the ebb and flow of the tide.	Minor/ Suggestion		Concur. Text has been revised.

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EPA	120	Chapter 3	3-15	627	EPA-tm	Recommend providing additional information regarding the public and private drinking water sources for communities and households within the project area, in which construction activities and road use could potentially affect the quality of drinking water wells and/or water sources. Include potential contaminants, migratory pathways, and possible mitigation measures (i.e. Adaptive Management Plans)	Critical/ Disagree		Known public and private drinking water sources which could be potentially affected are found in Appendix D, Table 16. The nearest subsurface source is a well that is 1.6 miles away from any alternative. Spills from the road are not anticipated to affect any of the subsurface wells. One surface water supply (Shungnak) is located 5.2 miles from Alternative C. Risk of spills is discussed in Section 3.2.3. Additional discussion has been added based on your comment.
EPA	121	Chapter 3	3-16	670	EPA - AW	While a qualitative evaluation of impacts is beneficial to start with, a quantitative evaluation of the estimated direct, indirect and cumulative impacts to aquatic resources is necessary in order to look for opportunities for avoiding and minimizing impacts, and complying with the CWA 404(B)(1) Guidelines and the 404 permitting process. We recommend reporting impacts to aquatic resources by project component (e.g., gravel mine, airstrip) and aquatic resource impacted (e.g., linear feet of stream, acres of wetland), similar to Table 1 (App C, p. 2) which provides a summary of each component of the project footprint.	Editorial		Comment noted. No change made. Will consider revision for the FEIS. Furthermore, the USACE in an email to the BLM on 5/7/19 indicated total wetland impacts rather than by feature is acceptable.
EPA	122	Chapter 3	3-16	661	EPA - AW	This sentence is confusing, and we suggest revising to emphasize that impacts are not being described as similar among alternatives, but rather the impacts resulting from construction for an alternative are similar to impacts anticipated during the operations phase for that same alternative.	Minor/ Suggestion		Concur. Text has been revised.
EPA	123	Chapter 3	3-16	664	EPA - AW	Unclear which part of Ch. 2 describes the applicant-proposed mitigation measures intended to avoid or minimize impacts on water resources. We recommend providing a more specific location/section number when referring to the applicant proposed mitigation measures.	Minor/ Suggestion		Citation is to the wrong location. It has been corrected to direct the reader to Appendix N.
EPA	124	Chapter 3	3-16	675	EPA - AW	Suggest referencing Maps 2-3 & 2-4 which identify material site locations. Reference to those maps would benefit agency decision makers and the public in picturing where material sites may be located.	Minor/ Suggestion		Reference to the maps has been added.
EPA	125	Chapter 3	3-16	682	EPA - AW	This reads like a reference document on what should be done to avoid impacts instead of explaining how this project will avoid and minimize impacts. Recommend revising language to reflect the actual actions to be taken; for example, changing this sentence to "Floodplains of meandering streams will be avoided .." Recommend also indicating which floodplain level would be avoided. For example, the 100-year floodplain.	Critical/ Disagree		The sentence has been modified to reflect the impacts of having a material site too close to a stream. It was not intended to be a mitigation suggestion. Mitigation is identified in Appendix N. As such, details on which floodplain level were not included in this location.
EPA	126	Chapter 3	3-16	653	EPA—CE	We recommend that the EIS include text here that mentions the potential impacts from ARD from roadcuts and fugitive releases of metals from haul trucks	Critical/ Disagree		Concur. Text has been revised.
EPA	127	Chapter 3	3-16	664	EPA - AW	Unclear which part of Ch. 2 describes the applicant-proposed mitigation measures intended to avoid or minimize impacts on water resources. We recommend providing a more specific location/section number when referring to the applicant proposed mitigation measures.	Minor/ Suggestion		Duplication (Comment 123)
EPA	128	Chapter 3	3-16	675	EPA - AW	Suggest referencing Maps 2-3 & 2-4 which identify material site locations. Reference to those maps would benefit agency decision makers and the public in picturing where material sites may be located.	Minor/ Suggestion		Duplication (Comment 124)
EPA	129	Chapter 3	3-16	682	EPA - AW	This reads like a reference document on what should be done to avoid impacts instead of explaining how this project will avoid and minimize impacts. Recommend revising language to reflect the actual actions to be taken; for example, changing this sentence to "Floodplains of meandering streams will be avoided .." Recommend also indicating which floodplain level would be avoided. For example, the 100-year floodplain.	Critical/ Disagree		Duplication (Comment 125)

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EPA	130	Chapter 3	3-16	653	EPA—CE	We recommend that the EIS include text here that mentions the potential impacts from ARD from roadcuts and fugitive releases of metals from haul trucks	Critical/Disagree		Duplication (Comment 126)
EPA	131	Chapter 3	3-16	655	EPA-cg	The text currently states that, "...increased turbidity during construction and operations..." and we note that increased turbidity is the only water quality impact discussed, while the document says there are visual indications that ARD is present along the road corridor. In addition to ARD, we recommend that metals leaching be evaluated and discussed in the EIS. There should also be discussion about the potential effects on water quality from asbestos.	Critical/Disagree		The EPA's suggestion that turbidity is the only water quality impact discussed is not accurate. The water quality and hazardous waste sections already discuss other potential water quality impacts including ARD, metals leaching, asbestos, and the risk of spills from mining and other traffic. Nonetheless, additional information has been included.
EPA	132	Chapter 3	3-16	662	EPA-cg	Chapter 2 says that BMPs would be followed, but BMPs related to water quality are not included in the chapter. We suggest including BMPs in Chapter 2 and referring the reader to them again here if helpful.	Minor/Suggestion		Potential BMPs and other mitigation are contained in Appendix N. References to Appendix N are included to aid the reader in finding the mitigation.
EPA	133	Chapter 3	3-16	674	EPA-cg	Gravel Extraction – we suggest describing how DEC's construction general permit (CGP) under the CWA would control water quality impacts and manage stormwater runoff from gravel extraction activities.	Minor/Suggestion		Added additional detail as suggested.
EPA	134	BLANK ROW							No comment on this line.
EPA	135	Chapter 3	3-17	695	EPA - AW	We recommend including additional information on how embankment thickness is determined in the EIS. The range of 3-8 feet seems large in terms of embankment thickness. It is unclear whether 3 feet is enough embankment depth to provide additional insulation to underlying soils or if 8 feet is necessary.	Minor/Suggestion		Information comes from the applicant and the applicant's engineering reports. The engineering reports are cited and are part of the SF299. No change made.
EPA	136	Chapter 3	3-18	755	EPA - AW	Recommend providing diagrams for typical bridge and culvert designs to accompany this section. For impact assessment purposes, generally, a longer bridge design will result in fewer impacts (including scouring) to the channel.	Editorial		A citation as to where these typical sections can be found has been included.
EPA	137	Chapter 3	3-18	749	EPA - AW	We recommend providing additional information relating to channel or wetland physical descriptions that warrant the use of a bridge versus one of the various sized culverts. A map including culvert and bridge locations indicated in App D Table 17 would also be helpful. Similarly, in the Culvert Installation section below (line 765) there is no criteria included for when the various sized culverts will be used and we recommend including the criteria used to make those types of decisions in project design. They will inform impact analysis and the avoidance, minimization and mitigation measures to reduce project impacts.	Critical/Disagree		The applicant's engineer (DOWL) has design criteria and identifies the crossing widths that relate to each type of structure (see SF 299 and accompanying engineering reports). A reference has been included in the text to refer the reader to where this information is available. Maps showing that level of detail were determined to be too much detail for the NEPA level of analysis and will be prepared during permitting for bridge, anadromous fish stream, and wetland permitting and will be necessary for the Plan of Development that BLM will require before issuing the ROW grant.
EPA	138	Chapter 3	3-18	749	EPA-cg	Bridge Construction- We note that there is no mention of using drill fluids to install bridge abutments within river channels. If there is the potential for this material to be discharged to the river (even in winter), we recommend this be disclosed and the impacts discussed.	Critical/Disagree		Details of the construction techniques are not known. Information on potential construction techniques, including potential to use drilling fluids has been included.
EPA	139	Chapter 3	3-19	792	EPA - AW	As stated, information on the identification of water access points along each alternative route is missing. This information is necessary to quantify the impacts to the water resource, as well as impacts from the necessary access roads. Recommend more information be collected and the water access points outside of the GAAR be identified in the EIS.	Critical/Disagree		It is not uncommon for exact water use needs and locations to be known at this preliminary level of engineering design. Often exact water use needs are not known until a construction contractor is on board and permitting for that use is typically deferred to the contractor. BLM has disclosed what is known and has described the effects qualitatively.
EPA	140	Chapter 3	3-19	812	EPA - AW	Recommend revising the text to be more direct (e.g., Access roads to water access points would be designed to avoid impacts on the floodplain).	Critical/Disagree		Potential mitigation is discussed in Appendix N. The text has been rewritten to focus more directly on impacts and to refer the reader to the Appendix for potential mitigation.
EPA	141					In many places we noticed use of the word "should" instead of the EIS directly stating what would/will occur should this project be implemented.			BLM only has authority to require mitigation on BLM-managed lands and final mitigation is not yet committed. The text has been rewritten to focus on impacts and to refer the reader to the Appendix for potential mitigation.

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EPA	142	Chapter 3	3-19	820	EPA - AW	Recommend specifying the number of sites requiring wastewater discharge, estimating capacity needs, and, evaluating the various disposal methods and their associated impacts. The EIS states that, "Impacts of wastewater discharge would depend on the method of disposal" but does not provide an analysis of the various disposal methods. This information is necessary for evaluating the project impacts, the applicant's mitigation measures and various alternatives.	Critical/Disagree		Details on exactly how wastewater discharge is to be handled are typically determined during permitting. Wastewater discharge is associated with maintenance stations and construction camps for the road. These locations are depicted on the map books in Chapter 2. Reference to where the reader can find these locations has been added to the text. Additional qualitative discussion has been included.
EPA	143	Chapter 3	3-19	745-746	EPA-cg	We note that rototrimming the ice road would minimize hydrocarbon contamination in the areas surrounding the roads and pads and suggest that rototrimming of the ice road be considered in the EIS, evaluated and possibly implemented as a mitigation measure for areas where spills occur.	Minor/Suggestion		Ice roads are not proposed by the applicant, per se. Ice roads are anticipated only to be short stretches used during bridge construction. The text under the Ice Road and Pad Construction heading has been modified to better describe what is proposed in terms of ice roads. Rototrimming can be further investigated during permitting based on additional design details.
EPA	144	Chapter 3	3-19	820-822	EPA-cg	Suggest including the option of small package water treatment plant for domestic wastewater in the EIS. Village lagoon systems may not be the best options for wastewater treatment for this project since they do not always comply with the secondary treatment requirements of 18 AAC 72. A small package plant may be more reliable in the freezing temperatures that have been previously described as occurring for a good portion of the year.	Critical/Disagree		Concur. Text has been revised.
EPA	145	Chapter 3	3-20	838	EPA - AW	We recommend referencing the section of the document where the number 4,524 acres comes from. Summarize how this estimate was derived. Appendix C (p2) states that the total project footprint is 4,471 acres and App C (p5) states that vegetation impact/loss, project footprint is 4,517 acres.	Factual Error		This appears to be an error. The text has been revised to refer to Appendix C, Tables 1 and 2.
EPA	146	Chapter 3	3-20	838	EPA - AW	Estimated impacts to wetlands, streams, lakes, etc have not been quantified and reported for each alternative in this section. Recommend reporting quantified estimated impacts to wetland acres and linear feet of stream or referencing to elsewhere in the document if reported elsewhere.	Critical/Disagree		Reference added as suggested.
EPA	147	Chapter 3	3-20	857	EPA - AW	Recommend quantifying the direct and indirect impacts to all mapped aquatic resources along each route. Additional figures of mapped resources (zoomed to a closer scale than provided by Map 3-9) should be provided to aid in understanding of the impacts by decision makers and the public. Floodplain mapping may not include all water resources crossed by the proposed road, and therefore we are concerned that the water quality impacts to all water resources (e.g., wetlands) may be underrepresented for all alternatives. We recommend including additional information as necessary to disclose the full range of impacts to all water resources.	Critical/Disagree		References to tables and sections where additional information is provided have been added.
EPA	148	Chapter 3	3-20	856-857	EPA-cg	The PDEIS states, "The impacts of the roadway on water quality were estimated by determining the miles of roadway in a floodplain or within 1,000 feet of a floodplain." Water quality impacts can and do occur in other places than streams. Any wetlands in the road alignment and on either side (line 1316 on page 3-30 says wetlands are common in the area and line 1385 on page H-38 says impacts can go beyond the development footprint) can be subject to higher turbidity from runoff, as well as from road bed materials that could leach contaminants into the surrounding surface waters of the U.S.. We recommend including the impacts from the project to wetlands and lakes as well as streams, when disclosing and evaluating project impacts in the EIS.	Critical/Disagree		Water quality impacts are discussed in multiple sections (as identified in the comment). Additional reference to other sections with relevant information have been included. The discussion has been clarified so as to not imply that water quality impacts would only occur in the floodplain analysis that was calculated.

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EPA	149	Chapter 3	3-21	879	EPA - AW	Recommend referencing the section of the document where the estimate 5,138 acres comes from and explain how this estimate was derived Appendix C (p2) states that the total project footprint is 5,074 acres and App C (p5) states that vegetation impact/loss, project footprint is 5,130 acres.	Factual Error		This appears to be an error. The text has been revised to refer to Appendix C, Tables 1 and 2.
EPA	150	Chapter 3	3-22	951	EPA - CE	Instead of saying that the mining activities “may” impact water quality, we suggest that this be changed to say that the activities are “expected” to have impacts to the water quality. This prediction is consistent with the statements in the Appendix H on lines 1630 to 1638 indicating that impacts to water quality are expected from most mining operations even if they are not initially expected from modeling activities associated with the EIS.	Factual Error		Concur. Text has been revised.
EPA	151	Chapter 3	3-25	1083	EPA-KP	Insert the word “major” between “few” and “pollutant”	Editorial		Concur. Text has been revised.
EPA	152	Chapter 3	3-25	1086	EPA-KP	“No monitored air pollutants...” is not accurate. We suggest revising to read, “No air pollutant monitoring sites....”	Factual Error		Concur. Text has been revised.
EPA	153	Chapter 3	3-25	1087	EPA-KP	Document indicates that due to lack of monitors, nearby monitors in Fairbanks and Denali are used to characterize the air quality at the project site. Air quality at those monitors is then described as “good.” We note that Fairbanks is an area of nonattainment for PM2.5 and would not be a good location for characterizing air quality throughout the project area. Further point of fact, it was just re-designated from “Moderate” nonattainment to “Serious” nonattainment because of the ongoing problem and high Design Value. We suggest revising to avoid implying that Fairbanks is an appropriate area to use to characterize affected air quality.	Factual Error		Concur. Text has been revised.
EPA	154	Chapter 3	3-25	1092	EPA-KP	Recommend revising text to refer to 40 CFR 81.302 for Alaska designations. As cited, 81.329 points the reader at Nevada designations.	Editorial		Concur. Text has been revised.
EPA	155	Chapter 3	3-26	1098	EPA-KP	Please remove the sentence “The PM2.5 24-hr design value trended down to meet the NAAQS (35 micrograms per cubic meter) between 2011 and 2015 (ADEC 2016). As we have mentioned above, Fairbanks was recently re-designated to from Moderate to Serious nonattainment due to failing to attain air quality standards by the attainment date. The current design value for the area is well above the NAAQS.	Editorial		Concur. Text has been revised.
EPA	156	Chapter 3	3-26	1100	EPA-KP	The term “manufacturer” likely refers to several things, including automobile engine producers and fuel producers. We recommend replacing ‘manufacturer’ with ‘industry’ or similar. Or, provide what is meant under manufacturer.	Minor/ Suggestion		Concur. Text has been revised.
EPA	157	Chapter 3	3-26	1105	EPA-KP	PM10 is defined in the document, recommend you also define PM2.5	Editorial		Pm10 is defined in the previous paragraph...no change required
EPA	158	Chapter 3	3-26	1107	EPA-KP	Please add “combustion by-products” to the list of things that make up the particulate mix	Editorial		Concur. Text has been revised.
EPA	159	Chapter 3	3-26	1166	EPA-KP	We note that the text mentions 40 CFR 80, 85, and 86. This is appropriate for discussing fuels and on-road vehicles. No mention is made of non-road engines, or regulations for portable generators, such as what would be used in construction. We recommend that the list be expanded to include all applicable regulations, including those for non-road engines and portable generators.	Editorial		Change made to previous paragraph where non-road pollutant sources are described
EPA	160	Chapter 3	3-26	1172	EPA-KP	Consider adding “(see Appendix H)” after 30,000 to 60,000 trips year.	Minor/ Suggestion		Concur. Text has been revised.
EPA	161	Chapter 3	3-26	1175	EPA - KP	Please provide detail on “dust control methods”. We recommend including details on the frequency and technology of dust control as well as evidence supporting the likely effectiveness.	Editorial		Note that dust control mitigation is found in Appendix N.

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EPA	162	Chapter 3	3-26	1196	EPA - EP	We suggest replacing the sentence “GHG emissions would be anticipated from vehicle and equipment combustion, relatively small in comparison to emissions on roadways with much greater traffic or congestion issues.” with a comparison to other industrial access roads in Alaska or other ROW authorizations by the BLM.	Editorial		Concur. Text has been revised.
EPA	163	Chapter 3	3-31	1335	EPA - AW	Recommend providing additional details on the results of the functional assessment for areas where this has been completed. A field-determined quantitative assessment of wetland functions impacted and wetland losses will be necessary for the Corps’ 404 permit decision.	Minor/ Suggestion		Additional details have been discussed on the results of the functional assessment for areas where this has been completed (per comments 227 and 500). The BLM will confer with the USACE to determine what will be needed between the DEIS and ROD.
EPA	164	Chapter 3	3-39	1670	EPA - AW	Given the proximity of the Nutuvuki fen, we are concerned that it is unclear what avoidance and minimization measures have been taken to avoid impacts. We recommend including additional details on what mitigation measures will be taken to avoid impacts to the Nutuvuki fen.	Critical/ Disagree		Because the fen is in GAAR and the crossing of GAAR is not subject to NEPA, the impact to and mitigation for this fen should be discussed in the NPS EEA.
EPA	165	Chapter 3	3-40	1706	EPA - AW	Clarify why PEM wetlands are considered to be high-value. Or reference where this info has already been provided	Minor/ Suggestion		Added in an explanation regarding why PEM wetlands are considered high-value to the first mention of impacts to PEM wetlands, in the Alternative A Impacts subsection.
EPA	166	Chapter 3	3-46	1961	EPA - AW	Bridges and culverts are intended to retain hydrology connections to support fish habitat. If culverts will eliminate these connections, perhaps bridges, larger culverts or different designs could be incorporated into the project. We recommend clearly identifying bridge and culvert design methods to maintain fish habitat in the EIS.	Editorial		Details on stipulations to maintain fish habitat and passage are found in Appendix N. Additional protection will be developed during ADF&G fish habitat permitting.
EPA	167	Chapter 3	3-46	1986	EPA - AW	We recommend that, instead of identifying that “inspection and maintenance of culverts and bridges would be necessary...” it would be helpful to decision makers and the public to understand how the inspections will be implemented, for example, mentioning that routine inspection and maintenance will occur by ADF&G	Minor/ Suggestion		Details on stipulations to maintain fish habitat are found in Appendix N. Additional mitigation measures will be developed during ADF&G fish habitat permitting.
EPA	168	Chapter 3	3-46	1990	EPA - AW	Recommend including the specific criteria (working with ADF&G) for culvert and bridge designs in the EIS. Figures identifying culvert and bridge locations would aid in reviewers understanding.	Critical/ Disagree		Details on potential stipulations to maintain fish habitat related to bridge and culvert design are found in Appendix N. Additional mitigation measures will be developed during ADF&G fish habitat permitting. EPA may also be interested in reviewing the applicant’s SF299 and H and H report for more details.
EPA	169	Chapter 3	3-49	2085	EPA - AW	It will be necessary to identify potential gravel extraction methods to estimate/quantify impacts to wetlands and aquatic resources. We recommend describing the gravel extraction methods in the EIS.	Critical/ Disagree		Footprint impacts of the proposed extraction areas are analyzed in the EIS and description of the impacts is provided. Gravel extraction methods are not known at this time, which is not unusual. That level of detail is not typically available at this level of design. The applicant would, however, be required to prepare more detailed design, and this detail would be available during permitting. Appendix N includes stipulations in 3.2.1 Geology and Soils), 3.2.2 (Sand and Gravel), 3.2.5 (Water), and 3.3.2 (Fish).
EPA	170	Appendix C	C-5		EPA - AW	The text states that, “Water Resources – Miles of alignment in floodplain, Miles of alignment located within 1,000 feet of floodplain, Area of assumed floodplain impact...” We recommend that this information be reported side-by-side with the information expressed in Table 17 of App D (p14), which reports floodplain impacts in acres. It is difficult to compare impacts given the way it is currently set up. We recommend combining all floodplain impact info into the same table.	Minor/ Suggestion		The table in chapter 2 is a summary table. The information presented in Appendix D may have the information you seek in an easier to compare format.
EPA	171	Appendix D	D-12	171	EPA-tm	Appendix D – 1.5 Water Resources (Table 16 – ADEC identified contaminated sites) -We recommend providing additional information on the location of the groundwater supply wells relative to the location of proposed road. We suggest that this could be done using one or more figures.	Minor/ Suggestion		Table 4 presents information on the distance from the road to the nearest known contaminated site. Table 16 provides the distance from the road to the nearest groundwater supply wells. Given that the nearest well is 1.6 miles from an alignment, BLM does not believe there is a need to depict the wells on a map.
EPA	172	Appendix D	D-13	177	EPA - AW	Would be helpful to add “diameter” or other descriptor to clarify what the 3, 10, and 20 feet represent.	Minor/ Suggestion		Concur. Text has been revised.

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EPA	173	Appendix D	D-14	191	EPA-tm	Appendix D – 1.5 Water Resources (Table 18 – Roadway impacts on water quality).	Minor/ Suggestion		No comment provided. No change made.
EPA	174					Title of Table 18 indicates there will be impacts to water quality. Recommend providing specifics on what water quality impacts are expected.			Table 18 summarizes metrics useful for gauging qualitative differences amongst alternatives. Impacts to water quality are discussed in the EIS. No change made.
EPA	175	Appendix E	E-12	150	EPA - AW	Given the wetland and waterbody types identified in Table 5 of App E, it is unclear how all of these have been grouped into the three wetland categories chosen for this table. We recommend that the EIS explain the rationale for grouping these three wetland categories.	Minor/ Suggestion		An explanation of why wetland types were aggregated for impact analysis was added to Appendix E, above Table 13. A column of "aggregated wetland types" was added to Table 5 for further clarification.
EPA	176	Appendix E	E-12	150	EPA - AW	Recommend quantifying and reporting the linear feet of stream impacted by each action alternative.	Minor/ Suggestion		Concur. Information added.
EPA	177	Appendix E	E-6	101	EPA - AW	Given the techniques used for mapping wetlands, including desktop methods as well as field verification for Alt's A & B, the refined mapping now being used as a result of this work would be beneficial to see on a smaller scale than provided by Map 3-9. Recommend providing additional figures identifying mapped wetlands at a much closer scale.	Critical/ Disagree		BLM discussed mapping with USACE, and there was agreement on mapping scale for the EIS. The maps are presented at a scale that is sufficient to depict the known information for a NEPA level analysis. Additional detail and mapping will be required of the applicant during permitting.
EPA	178	Appendix E	E-6	94	EPA - AW	Map 3-8 is Map 3-9, the wetlands map. Revise to correctly identify the wetlands map	Factual Error		Concur. Text has been revised.
EPA	179	Appendix H	H-4	250	EPA--CE	We recommend providing information in the EIS regarding the current and expected future economic feasibility of mining occurring within this region.	Critical/ Disagree		BLM has summarized and cited to materials related to the economic feasibility of mining occurring in the district. Given the information available, BLM has provided a summary of a reasonably foreseeable mining scenario. Per BLM NEPA Handbook (2008), "BLM is responsible for documenting NEPA compliance for an access road right-of-way application, regardless of the use for which the access is requested." This implies economic feasibility of the applicant's use is not relevant to BLM's responsibility under NEPA.
EPA	180	Appendix H	H-4	215	EPA—CE	Please provide information on other metals/metalloids that may be enriched in these ore deposits, but are not economical/desired by the mining industry. Specifically, discuss mercury and selenium and whether these are expected to be elevated in the areas of proposed mining activity. Elevated levels of selenium and mercury often co-occur with other desired mineral deposits and are a concern due to their potential release to the environment as a result of mining activities. Due to similar hydrothermal processes, gold deposits are often enriched in mercury and coal deposits are often contain elevated selenium. Please provide information (or speculation if data does not exist) on the potential co-occurrence of these metals/metalloids within the targeted mining areas. If data suggest that Hg in geologically enriched within the footprint of the mines or of the access road, then the potential for hydrological changes to impact mercury methylation become a concern that should to be taken into consideration in this DEIS.	Critical/ Disagree		This information is not readily available. BLM has described a reasonably foreseeable mining scenario based on the information provided. Speculation on various metals that may or may not be present given the level of information publicly available is not reasonable. This EIS is not getting environmental clearance for any individual mine that may develop. The level of detail requested may be appropriate for consideration during subsequent mine permitting activities.
EPA	181	Appendix H	H-5	270	EPA-EP	Revise Table 2-2 to more directly show how the typical timeframes for mine exploration and development relate to construction and operation of the road.	Editorial		The requested information is found in Table 2-10
EPA	182	Appendix H	H-5	279	EPA—CE	We recommend that the sentence speculating that future technologies will minimize environmental effects be removed. If it is being assumed that future mining operations will have advanced in terms of reducing environmental impacts, it should also be taken into consideration that future environmental regulations may have water quality standards that are lower and/or harder to meet than under current conditions. With the uncertainty inherent in both components, we suggest striking the sentence.	Minor/ Suggestion		Concur. Text has been revised.

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EPA	183	Appendix H	H-6	321	EPA—CE	We recommend including text that indicates that long-term water treatment is expected to occur due to the mining operations occurring in an area with high ARD potential which will require treatment in perpetuity to meet water quality standards. We also recommend disclosure and evaluation of whether long-term water treatment would require additional access via the road. After mine closure, most mines require ongoing water treatment to occur for many years and often in perpetuity to meet water quality standards. Therefore, it is likely that there will be multiple water treatment facilities (at least one for each mine) that will require continued operation and maintenance for long periods of time post-mine closure. We recommend including information that ongoing water treatment is expected at all mine sites post-closure. This is briefly mentioned on H-15 line 635, and we recommend it be emphasized earlier in the document as well. The likelihood of long-term water treatment is underscored by statements in Chapter 1 indicating that ARD is predicted for this mining area.	Critical/ Disagree		Information suggested has been included in Table 2-2, under the Tailings Disposal subsection, and under the Long-Term Monitoring subsection. The Long Term Monitoring subsection is the logical place to discuss this topic. Table 2-2 and Tailings Disposal provide earlier references.
EPA	184	Appendix H	H-7	367	EPA-EP	Disclose, either here, in the hypothetical scenario assumptions, in the Executive Summary, or elsewhere in the PDEIS whether road construction would be likely/assumed to begin before a mine receives all necessary approvals and permits from various resource agencies.	Editorial		Timeframes are spelled out in Table 2-10. AIDEA has requested, and the BLM purpose and need specifies, that the the road could be used to support exploration. This means it could be open before a mine received all necessary permits and approvals from various agencies. A sentence to this effect has been added here, in the Feasibility Studies and Permitting subsection.
EPA	185	Appendix H	H-10	449	EPA—CE	This sentence is unclear whether acid rock drainage (ARD) is expected from any of the mines in this area. Based on the exploration information, there should be sufficient information to determine that the risk of ARD is low or high, based on data on the host geology and sulfur content in the exploratory samples. We recommend including information in Appendix H that summarizes the potential ARD risk associated with this mining district based on analysis of the existing exploratory dataset. Chapter 1, page 3-3, indicates that the potential for ARD within this region is very high and is even apparent via aerial imagery as well as from knowledge that the ore is a volcanic hosted massive sulfide deposit. We recommend that this information regarding the certainty of ARD impacts from disturbances in this region should be reflected in Appendix H. We recommend that the text in Appendix H also be consistent with the discussion of the likelihood of ARD in Chapter 1	Critical/ Disagree		This topic is addressed in Appendix H, Section 3.3.1 Geology and 3.4.2 Fish and Amphibians. More information has been added in the cited subsection under Overburden and Waste Rock Disposal and Tailings Disposal headings.
EPA	186	Appendix H	H-11	474	EPA-cg	In Table 2-3 Estimated equipment to be used at each mine for production purposes, blasting is discussed in the text without a list of the that would carry the blasting agents and allow them to be pumped into the drill holes. We recommend listing the equipment used to carry blasting agents	Minor/ Suggestion		Updated Table 2-3 to include 2 MMU bulk explosive trucks
EPA	187	Appendix H	H-12	503-504	EPA-cg	We note that the text states that "Most of the metals would likely be copper and lead concentrates..." and Figure 2-3 shows a zinc concentrate product in addition. Consider revising the text as necessary.	Minor/ Suggestion		First paragraph in this section, second sentence, says: "Figure 2 3 illustrates the typical steps in the process and is not specific to a particular ore." No change required.
EPA	188	Appendix H	H-13	522	EPA—CE	While backfilling an open pit with waste rock is a common practice, it seems less common to backfill with tailings. We suggest that the EIS discuss tailings storage options, including within a properly designed tailings impoundment facility.	Critical/ Disagree		The paragraph immediately following the paragraph beginning with "Tailings used as backfill..." describes the disposition of tailings not reused as backfill (i.e., the tailings management facility), including information on containment. No change required.
EPA	189	Appendix H	H-13	536	EPA—CE	We recommend that the impacts from water table drawdown be discussed in this section of Appendix H. An important impact of a mining operation is the drawdown of the water table to access ore at depth. This drawdown of water results in a large cone of depression and in proximate streams drying up. This is mentioned later on page H-43 line 1612 but we recommend discussing in this earlier section of Appendix H.	Critical/ Disagree		Concur. Information added.

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EPA	190	Appendix H	H-13	515	EPA-cg	We recommend that the EIS include a citation to a report indicating that these additives are not toxic in order to support this statement.	Critical/Disagree		Sentence was deleted. Statement was taken from another document and the term non toxic is relative to other aspects of the mining operation. Since a citation to support this claim is not available, sentence was deleted.
EPA	191	Appendix H	H-13	545-546	EPA-cg	The text states that, "Contact water is water that comes in contact with the mining operations, such as the waste rock or TMF, and as a result may contain pollutants." While this statement above describes contact water, it leaves out a critical component of it -- mine drainage and does not describe the differing regulatory mechanisms that apply to different categories of contact water. We recommend discussion of mine drainage in this section as well as the regulatory mechanisms that apply.	Critical/Disagree		Information added on mine drainage.
EPA	192	Appendix H	H-13	552	EPA-cg	The EIS states that, "Prior to being reused in the facility or discharged, the process water is collected and treated." We note that process water cannot be discharged except under certain circumstances. Some volume of process water may be discharged if it is commingled (stored) with an allowable source like mine drainage or net precip. Then only the volume of the allowable source may be discharged. We recommend revising this statement to be more accurate.	Factual Error		Concur. Information added.
EPA	193	Appendix H	H-14	571-572	EPA-cg	We recommend that the EIS also evaluate a road corridor that includes a natural gas pipeline in the ROW. There is a possibility of a statewide natural gas pipeline in development so it seems that a pipeline could be considered to deliver natural gas to the potential mining projects as part of the analyzed/disclosed project components and alternatives.	Critical/Disagree		During discussion with agencies and mining experts to develop the mining scenario consideration of a natural gas pipeline was considered. Based on that input, it was determined that a natural gas pipeline was not reasonably foreseeable. AIDEA has not requested a natural gas pipeline. If a future mining company requests the ROW allow for a pipeline, it will be considered in a subsequent NEPA project.
EPA	194	Appendix H	H-17	701	EPA-cg	We recommend including discussion that if concentrate transport occurs other than by truck (pipeline) then consideration should be given to the widening of the ROW, so that it could accommodate the pipeline being buried along the road.	Critical/Disagree		Again, no pipeline is proposed by AIDEA and is not reasonably foreseeable. The proposal is to haul ore by truck. If a future mining company requests the ROW allow for a slurry pipeline, it will be considered in a subsequent NEPA project.
EPA	195	Appendix H	H-17	702	EPA-cg	The text states that "Once ore were processed and packaged, it would be transported ..." We suggest revising to reflect that ore is mined and processed into two components, the uneconomical tailings and the valuable concentrate. It is the concentrates that would be packaged and transported, not the ore.	Factual Error		The sentence and heading above it have been revised to better reflect that it is the concentrate that is transported.
EPA	196	Appendix H	H-18	718	EPA-cg	We recommend the EIS consider and disclose whether there will be a yard to store the containers, as the impact of this storage area does not seem to be discussed.	Minor/Suggestion		Such a staging area was addressed under Recreation and Tourism. The staging area has been added to 2.1.5 under the Transportation--Transport of Concentrate heading, approximately where indicated by this comment.
EPA	197	Appendix H	H-19	736	EPA-cg	"Sun and Smucker mills are half the size of Arctic mills, and use half the supplies and fuel, or use Arctic mill." We note that H-6 Lines 292-293 say that Sun and Smucker will use the processing facilities at Arctic and Bortite while H-20 Line 781 says they would use the Arctic mill. We recommend that these discrepancies be addressed.	Critical/Disagree		Discrepancy addressed.

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EPA	198	Appendix H	H-19	762	EPA-cg	Table 2.8. Number of Containers Required for 1 Day of Production (outbound only). This header is confusing because there are 92 containers from Arctic coming down the Dalton (46 doubles coming across Ambler) and then the text discusses that each rail car will hold 2 containers and lists 46 containers. We recommend that either all of the values in the Table should be doubled to reflect the number of containers or the header should be reworded to discuss the number of rail cars. There seems to be a discrepancy	Minor/ Suggestion		This is not straightforward, but the table has been checked and is correct. Changes have been made to Table 2-6 also, to help clarify the 92 trips on the Dalton Hwy. Regarding the comments on Table 2-8: The Production Rate column indicates 1507 short wet tons of concentrate produced. The ore containers hold 30 metric tonnes or 33 short tons. Dividing 1,507 by 33, we get 46 containers per day. To further check, the text says each train car hauls two containers, and a train is composed of 75 cars. That is 150 containers transported per train. In 28 days, trucks deliver 1,288 containers to a Fbks rail yard (46x28). 1,288 div by 150 containers per train means 8.666 trains haul ore in 28 days. Divide this by 4 weeks to get 2.165 trains hauling ore each week. To get the train traffic total, double the number to account for backhaul of empty ore containers; that equals 4.3.
EPA	199	Appendix H	H-19	765-766	EPA-cg	"Upon arrival at a port, the containers would be removed from the rail cars and stored temporarily in a container yard." If there is no capacity at the 4 ports listed in the document for this additional cargo, then more space would be needed to build a container yard and that results in more impacts. We recommend including discussion of all of the options for container storage in the EIS, including their impacts and the mitigation measures that could be taken to address those impacts.	Minor/ Suggestion		Additional Concur. Information added.
EPA	200	Appendix H	H-21	801	EPA-cg	The text mentions here that, "disturbance from exploration is not reflected in the table, except for the Kensington gold mine." and we note that Table 2-11 does not include the Kensington Gold Project so you might want to revise Table 2-11.	Minor/ Suggestion		Deleted Kensington reference
EPA	201	Appendix H	H-35	1259	EPA-tm	Recommend providing additional information regarding the public and private drinking water sources for communities within the project area in which mining and post-closure activities could potentially affect the drinking water wells and/or water sources including potential contaminants, migratory pathways, and mitigation measures (i.e. Adaptive Management Plans). Suggest that the EIS develop and present water quantity and quality assessment plans specific to the mining district, including mitigation measures and/or adaptive management. Also recommend including discussion of past actions in the project area? that have resulted in changes to existing water quantity and quality and plans for characterizing baseline water quality in order to compare impacts from before, during and after proposed future mining.			Drinking water sources are discussed in Appendix D, Table 16. The level of detail requested is appropriate for a mine EIS. Because no mine proposal or development plan has been submitted, the requested details cannot be provided. Past actions that have affected water quality are discussed. Impacts at the level of detail requested is beyond the scope of the current proposed action and current NEPA analysis.
EPA	202	Appendix H	H-36	1278-1279	EPA-cg	"Mitigation measures for potential mine water use and treatment are described in Section 2.1." We note that Section 2.1 of Appendix H contains a general statement about mitigation measures being included in individual project NEPA documents but does not include any mitigation measures for mine water use or treatment. We recommend adding these proposed measures to Section 2.1.	Critical/ Disagree		The sentence has been revised to reference typical mine operations and cross referencing to Section 2.1.5. This EIS does not include specific mitigation measures for mines, because specific mine proposals are beyond the scope of the proposed action.
EPA	203	Appendix H	H-37	1324	EPA - KP	No mention of air emissions from villages in the general area of the proposed road. We recommend describing the air emissions from villages in the EIS.	Minor/ Suggestion		Concur. Information added.
EPA	204	Appendix H	H-37	1328	EPA - KP	Document proposes mitigation by wildfire management practices. Suggest replacing "wildfire management practices" with the list of activities that encompass wildfire management, such as, fire suppression. Mitigation details, including the likelihood of implementation and likelihood of effectiveness, support conclusions that mitigation will reduce impacts to the environment.	Minor/ Suggestion		A list of activities that encompass typical management practices has been added. BLM is not able to speculate as to the effectiveness or likelihood of future management decisions. BLM seeks to describe what is reasonably foreseeable and believes speculating is not in keeping with accepted NEPA practice.

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EPA	205	Appendix H	H-37	1334	EPA - KP	Please revise this to say that the entire area is in an unclassifiable/attainment area, please see 40 CFR 81.302. The closest nonattainment area is Fairbanks.	Editorial		Concur. Text has been revised.
EPA	206	Appendix H	H-44		EPA-cg	Starting on this page, there are several papers cited in the document outlining the impacts of mining on the environment. (Woody et al. 2010; Kuipers et al. 2006; Maest et al. 2005). EPA suggests that the information presented be put into context showing the weight of an actual event occurring. It seems that the probability of an impact taking place should be given and the magnitude (severity) and duration of that potential impact disclosed.	Minor/ Suggestion		As suggested by CEQ, BLM has cited to other sources should the reader desire additional information on potential mining impacts. Because no specific mining development plan is proposed BLM is unable to speculate as to the magnitude or likelihood of events occurring. It will depend on the specifics of the proposed plan of development and the mitigation proposed as part of that development plan. BLM seeks to describe what is reasonably foreseeable and believes speculating is not in keeping with accepted NEPA practice.
EPA	207	Appendix N	N-108	3114	EPA-EP	Replace asbestosis with asbestos	Editorial		Concur. Text has been revised.
EPA	208	Appendix N	N-7	648	EPA-EP	It would be very unusual to test human blood for asbestos. Asbestos poses a health risk when inhaled. There's no easy way to perform biomonitoring for asbestos, but workers potentially exposed to asbestos should be in a medical monitoring program. Recommend adding phrase "medical monitoring" after "baseline studies and exposure pathway studies"	Editorial		Concur. Text has been revised.
USACE	209	Chapter 2	35	Construction phasing	John Sargent	Was the phased design (1-3) considered in the alternatives analysis?	Critical/ Disagree	Explain how the phases 1-3 were considered and chosen in the design of road. Request information why phased road design is needed. The phasing doesn't appear to minimize.	Project phasing is part of the applicant's proposal. The applicant has stated the Phase 2 road may be all that ever is needed. FLPMA requires consideration of the minimum facility required to accomplish the project purpose, and that is done here. As explained in the introduction to Chapter 3, BLM considered the impacts of the phasing of the road and the EIS addresses impacts by road phase where warranted.
USACE	210	Appendix G			John Sargent	Wetland delineation methodology and widths used for direct and indirect impacts should be disclosed in EIS.	Critical/ Disagree	Briefly describe the wetland delineation methodology used and the gaps in information and issues involved regarding making fair comparisons among alternatives with respect to impacts to wetlands.	Impact widths are described in Appendix E, under vegetation and referenced in the wetland impact section. Information regarding wetland delineation methods were already provided in Appendix E. Added additional information regarding methods, from DOWL 2014 report and DOWL Mapping Memo (dated December 2018).
USACE	211	Chapter 1	23	621	John Sargent	Avoidance, minimization and mitigation was not described in this section.	Critical/ Disagree	The mitigation section should include avoidance, minimization measures and mitigation for significant unavoidable impacts.	Mitigation is found in Appendix N. If USACE has specific mitigation measures for wetlands and waters of the US, please suggest them.
USACE	212	Chapter 3	56	767	John Sargent	The size class (minor, moderate, large) of culverts between 3 and 6 feet are not specified. It is not clear whether culverts in this size range are in the minor or moderate size category and whether this size class would be embedded to allow fish passage.	Critical/ Disagree	Resolve whether culverts in the 3 to 6 feet classes are minor moderate and whether they would be designed to allow fish passage.	Defined AIDEA's proposed culvert class sizes. AIDEA has committed to installing fish passable culverts where needed.
USACE	213	Chapter 3	56-57	765-789	John Sargent	Its not clear if culverts designed to enable adequate fish passage at stream crossings would be installed during phase 1 and 2.	Critical/ Disagree	Outline if culverts during phase 1 and 2 would allow fish passage. And if not how this would minimize impacts to aquatic resources. Further explanation for the pioneer road in phases 1 and 2 is need.	Additional Concur. Information added.
USACE	214	Appendix G	8		John Sargent	What do the public health values e.g., 1, 2, 3, represent on a scale hi impact to low impact? is a one higher impact than a two for example?	Editorial	Recommend identifying in footnote how these numbers scale from high to low and at what level is health risk considered unacceptable?	Appendix G is the incorrect citation. BLM presumes the comment is in reference to the HIA. Page 8 of the HIA does refer to the health value definitions. The impact assessment categories are defined in Table 43.
USACE	215	Chapter 1	26	68	John Sargent	Appendix H suggests the road would be removed at end of road closure (see comment below) but not clear if this is part of the proposed action or a likely future scenario.	Critical/ Disagree	Clarify if road reclamation is part of the proposed action or a likely future scenario.	This is part of AIDEA's proposed action. It is in their SF299 application. In chapter 2, the Lifetime of the Project heading has been modified and text added to better explain that closure and reclamation are part of the AIDEA proposal.

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USACE	216	Appendix H	28	783	John Sargent	Unclear in table 2-10 in Appendix H if road closure and reclamation is proposed action or a likely future scenario.	Editorial	Suggest clarifying in Appendix H and in body of DEIS text that reclamation is proposed action or likely future scenario (but see comment below page 77).	This is part of AIDEA's proposed action. It is in their SF299 application. See more in Chapter 2. This has been clarified in a table note to Table 2-10
USACE	217	Appendix H	77	2681-2685	John Sargent	The appendix H describes possible scenerios if the road becomes a public road and also if it is reclaimed- this seems contradictory to 2.4.1 page 33-Public Access Road Vs. Industrial Road that states the road would not have general public access and appendix H, page 28, line 783 that road would be reclaimed.	Critical/ Disagree	Clarify to reflect if the road close and reclamation is a proposed action or likely future scenario. The road cant be a public road if the proposed action requires removal of the road and reclamation.	The road is not proposed ever to be a public road. This paragraph has been revised to remove the implication that the road as proposed could be opened to the public and to reduce the emphasis on public access post-road-closure, given that bridges and culverts are proposed to be removed and given that snowmobile access over long distances occurs in the project area today. Closure and reclamation of the road is part of the proposed action, so if a road alternative is approved, reclamation would be a requirement. Changing that requirement would require additional NEPA in the future.
USACE	218				John Sargent	Cannot see the wetlands within the road impact area in the wetlands map 03-09 because of the color coding. Also there is no scale. Wetland areas shown as pixels.		Consider multiple maps at a smaller scale. Or one map for Alternative A and B, and one map for Alternative C.	Wetland impact acreage calculations are done on a more detailed desk top wetland delineation. BLM contemplated making detailed mapbooks of the alternatives showing the more detailed wetland mapping. However, these mapbooks would likely be over 100 pages per alternative. BLM discussed the scale of wetland mapping with the USACE. USACE confirmed that presenting the impact calculations tabularly with the broader wetland map showing the area would suffice for their NEPA review. Additional detail will be required of the applicant during permitting.
USACE	219	Appendix A	4	46	Ashley Kraetsch	Too much detail for an overview map	Minor/ Suggestion	Could provide zoomed in segment views of the project area so that more detail is visible.	BLM has determined the detail is sufficient for an overview map.
USACE	220	Appendix E	10	103	Ashley Kraetsch	How does ACCS define "rare" plants?	Minor/ Suggestion	Explain the definition of "rare" prior to the table.	There is not a specific definition of rare plants provided by ACCS.
USACE	221	Appendix E	14	129	Ashley Kraetsch	Why was a 10 foot zone chosen?	Minor/ Suggestion	Explain reasoning behind choosing the number 10 (or explain it in body of EIS).	Ten feet is a common buffer applied to road projects in Alaska. It represents an area of sufficient width for construction equipment to operate. The buffer is not typically used along the entire alignment and therefore it represents an overestimation of the potential impacts. The impacts to the construction area are generally considered temporary.
USACE	222	Appendix E	20	194	Ashley Kraetsch	Can you quantify this information?	Minor/ Suggestion	Provide percentage of project area that consists of possible habitat for avian species.	No, that detail is not available. Species/habitat associations are not available in high detail and habitat mapping is not refined enough to develop such associations.
USACE	223	Appendix E	20	194	Ashley Kraetsch	Do we have any information about the probable/possible impact to each species with each alternative?	Minor/ Suggestion	Indicate whether an impact to each avian species is unlikely, possible, or probable under each alternative (similar to table 17).	No, that detail is not available. Species/habitat associations are not available in high detail and habitat mapping is not refined enough to develop such associations.
USACE	224	Appendix E	25	211	Ashley Kraetsch	Can you quantify this information?	Minor/ Suggestion	Provide percentage of project area that consists of possible habitat for mammalian species.	No, that detail is not available. Species/habitat associations are not available in high detail and habitat mapping is not refined enough to develop such associations.
USACE	225	Appendix E	25	211	Ashley Kraetsch	Do we have any information about the probable/possible impact to each species with each alternative?	Minor/ Suggestion	Indicate whether an impact to each mammalian species is unlikely, possible, or probable under each alternative (similar to table 17).	No, that detail is not available. Species/habitat associations are not available in high detail and habitat mapping is not refined enough to develop such associations.
USACE	226	Appendix E	26	215	Ashley Kraetsch	How do you define "fall" and "winter"?	Minor/ Suggestion	Provide month or seasonal descriptors in addition to season names.	Dates added to table notes and text.
USACE	227	Chapter 3	69	1331-1336	Benjamin Soiseth	Should include additional discuss of wetland functions and services	Minor/ Suggestion	This could include typical functions for wetland types.	Added additional paragraph to the AE section and an additional sentence to EC section.
USACE	228	Chapter 3	78	1713	Benjamin Soiseth	Clarify why 9 acres have not been mapped.	Minor/ Suggestion		Unmapped area has been mapped and included in the analysis.
USACE	229				Benjamin Soiseth	General comment. Much of the analysis does not include magnitude or duration of impacts.			A paragraph was added at the end of Section 3.1 clarifying duration and magnitude, and resources discussions will be reviewed to address differences from normal pattern

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ADF&G	237	Appendix L	116		ADF&G	On page 116, harvest composition information is given for the 2008 study year for White Mountain. This study was only big game harvest information, so composition could not be known. 2006, in contrast, was a comprehensive harvest survey. However, in this year White Mountain residents harvested 6,825 lbs of caribou, which only represents 9% of the total harvest (77,172 lb).	Factual Error	White Mountain is not one of the WAH communities in which caribou contributes a high percentage to the total estimated harvest, so it should be removed from the text and the table corrected	Table 41 corrected and text revised (Section 5.6).
ADF&G	238	Appendix E	1	59	ADF&G	Very last sentence in Brooks Range Ecoregion description, recommend adding Dolly Varden after Arctic grayling.	Minor/Suggestion	Recommend adding Dolly Varden	Concur. Text has been revised.
ADF&G	239	Appendix E	1	59	ADF&G	Under Kobuk Ridges and Valleys section, statement about region having "short, cool summers" is not quite accurate. Average high temp in July in Ambler is just over 71 degrees, and it gets over 80F every summer. Can be one of the warmest areas in the state in the summer.	Minor/Suggestion	Change statement.	No change. Description taken from BLM source: Boucher et al. 2016. CY REA Final Report. The Ecoregions were delineated and defined by Nowacki et al. 2001 and definitions within the CY REA were taken directly from this source. This exact definition is also used in ADF&G's Wildlife Action Plan.
ADF&G	240	Appendix E	15	169	ADF&G	In Table 16, under the heading "Considerations Species to the Study Area", we suggest adding commercial fishery target to chum salmon and sheefish.	Minor/Suggestion	Add statement.	Concur. Text has been revised.
ADF&G	241	Appendix F	3	87	ADF&G	In Table 5, we suggest changing the "yes" under commercial barge service for Ambler, Shungnak, and Kobuk to "not consistent service". Barge is very dependent on water levels and the Kobuk can have long stretches between successful barge trips.	Minor/Suggestion	Change category.	Concur. Text has been revised.
ADF&G	242	Appendix E	15	169	ADF&G	Burbot in Yukon R. drainage are rarely referred to as "mudsharks", primarily "lusk"	Critical/Disagree	Clarify statement.	Concur. Text has been revised.
ADF&G	243	Chapter 3	3-68	2907-13	ADF&G	The study referenced (Joly et al 2016), was not designed to assess moose abundance, so this is not a legitimate reference. Additionally, the moose collared for that study were non-randomly selected in two study areas, one to the north and one to the south of Alternatives A & B, therefore even a post-facto assessment of that question using that data is not possible.	Factual Error	Suggest removing inferences about moose abundance based in Joly's reference.	Removed text associated with Joly et al. 2016
ADF&G	244	Chapter 3	3-68	2945	ADF&G	Moose are common in Unit 24 west of the John River. Moose densities in the area are low, but they are not rare. The study referenced is not applicable to the question of abundance.	Factual Error	Suggest removing inferences about moose abundance based in Joly's reference.	Removed text associated with Joly et al. 2016
ADF&G	245	Chapter 3	3-69	2949-50	ADF&G	We do not believe that is an appropriate reference for bear abundance. We do not believe the data from that study represented non-randomly selected bears, that would allow that type of assessment	Editorial	Suggest removing inferences about bear abundance based in Joly's reference.	Removed text associated with Joly et al. 2016
ADF&G	246	Chapter 3	3-95	4102-04	ADF&G	Trapping is an important economic resource for some subsistence users, so the emphasis on minimal food reliance is missing the more important contribution.	Minor/Suggestion		Reworded text to emphasize importance of trapping as an economic and cultural activity.
ADF&G	247	Chapter 3	3-66	2854	ADF&G	Although trapping is recognized, it appears the potential impact to an individual trapper's established trapline is under-stated. Traplines are relatively static and are mostly restricted to long established trails.	Minor/Suggestion		Added "or interference with long-established traplines" to referenced sentence.
ADF&G	248	Chapter 3	3-94	4068-69	ADF&G	This section emphasizes the Subsistence Use of caribou, but because Alternative C was not part of the public presentation the BLM received very little input on the importance of moose in this area. There is no table about moose harvest in Appendix F, comparable to Table 14 for caribou. Considering the primary contributor to meat among the communities listed in this sentence is from moose, it seems to be a serious understated consideration for moose impacts throughout the EIS. Although moose may be less represented among the total number of communities, in the Interior it is the greatest single source of those communities because they have fewer alternative resources.	Critical/Disagree	Add table with moose harvest to Appendix F.	Added table in App. F summarizing moose harvests and text in Chpt. 3, Section 3.4.7 describing harvests of moose among the subsistence study communities.

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ADF&G	249	Chapter 3	44	1872	ADF&G	The term "Notable" implies that this is a well-known spawning location where burbot have been captured and spawning readiness or post-spawning effects have been noted. However, in the study referenced, burbot were captured, radiotagged, and the fish were located in small aircraft to locations during the time of spawning, but no ground truthing was conducted.	Editorial	Change the word "notable" to "probable" AND delete "mouth of Michigan Creek" to "upper Wild River" because they were located at the next tributary upriver during the early February 2015 aerial tracking flight.	Concur. Text has been revised.
ADF&G	250	Chapter 3	43	1829	ADF&G	Misspelled word	Editorial	Spelled Mettenpherg	Concur. Text has been revised.
ADF&G	251	Chapter 3	44	1873	ADF&G	Northern pike.	Editorial	Add "Northern" before "pike"	Concur. Text has been revised.
ADF&G	252	Chapter 3	43	1852	ADF&G	Sheefish (largest members of the whitefish family) spawn similarly. All are broadcast spawners.	Editorial	Clarify that sheefish are the largest members of the whitefish family, and therefore also broadcast spawners.	Concur. Text has been revised.
ADF&G	253	Chapter 3	43	1862	ADF&G	BOTH Yukon & Kobuk rivers have sheefish & whitefish populations.	Critical/ Disagree	Change sentence to, "Maintaining spawning habitat is critical to the survival of Kobuk and Yukon rivers sheefish and whitefish populations because these species spawn in relatively few and distinct areas with specific habitat needs."	Concur. Text has been revised.
ADF&G	254	Chapter 3	44	1866	ADF&G	Stating that "spawning habitat is not limited by winter conditions" is unnecessary.	Editorial	Delete "Spawning habitat is not limited by winter conditions".	Concur. Text has been revised.
ADF&G	255	Chapter 3	3-83	3576	ADF&G	The DEIS states, "While ANILCA provided for passage through GAAR, management of these lands is the most sensitive to visual changes of any in the project area, particularly the designated Wilderness." The lands outside designated wilderness, where the road is proposed, are managed for their own VRM, not the VRM of the designated wilderness nearby. The project has no impacts to lands designated wilderness. ANILCA carefully balanced the need for conservation and development by drawing the boundaries between the two.	Critical/ Disagree	Edit the document to remove references to wilderness impacts.	The text does not say the alignment would pass through designated Wilderness; it says designated Wilderness is especially sensitive to visual changes. A sentence has been added to clarify "While Alternative A would not pass through Wilderness, it would run close to it."
ADF&G	256	Exec Sum	ES-6	610	ADF&G	The Executive Summary states, "Recreation and tourism are closely related to wilderness values in the area. Opportunities for solitude would be affected whether backpacking, rafting, fishing or hunting by floatplane or motorboat, or going to traditional fish camps from nearby communities. The presence of a road would alter the experience." Opportunities for solitude is one of the four characters of designated wilderness. No lands designated wilderness will be affected by any alternatives. ANILCA carefully balanced the need for conservation and development by drawing the boundaries between the two.	Critical/ Disagree	Edit the document to remove references to wilderness impacts.	An area does not have to be designated Wilderness to have wilderness characteristics. Wilderness characteristics exist in the project area in designated Wilderness, in areas not designated but managed for such characteristics (the Preserve, wild and scenic rivers), on BLM lands formally noted as having wilderness characteristics, and on non-federal lands that are undeveloped and natural. The document properly discloses impacts to such characteristics where they occur. The main point related to this comment is that the recreational experience currently available would change. No change has been made to the Executive Summary. See also response to 255.
ADF&G	257	Chapter 3	3-83	3576	Jason Cheney	The DEIS states, "While ANILCA provided for passage through GAAR, management of these lands is the most sensitive to visual changes of any in the project area, particularly the designated Wilderness." The lands outside designated wilderness, where the road is proposed, are managed for their own VRM, not the VRM of the designated wilderness nearby. The project has no impacts to lands designated wilderness. ANILCA carefully balanced the need for conservation and development by drawing the boundaries between the two.	Critical/ Disagree	Edit the document to remove references wilderness impacts.	Same as comment 255. See response to 255.

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ADF&G	258	Exec Sum	ES-4	556	Jason Cheney	The Executive Summary states, "The EIS incorporates the EEA by reference and depends on the EEA to address details of impact within GAAR and the Kobuk Wild and Scenic River." It is difficult to determine the impacts of the alternatives when this EIS only "incorporates the EEA by reference and depends on the EEA to address details of impacts." Title XI regulations located at 43 CFR 36.6(a) (5) state that the federal agencies shall solicit and consider the views of the State. The Department has management authority for fish and wildlife as well as permitting authority for anadromous water crossings. Since the EEA is not available for review, we request a draft of the EEA to determine the impacts of EEA alternatives on stream crossings or sensitive wildlife areas.	Factual Error	The selection of the road routing needs to be coordinated with the Department. In addition, the draft EEA should be publicly released prior to the DEIS so that it can be included in DEIS appendix.	NPS has said the document will be available for concurrent review. Because the GAAR decision is not subject to NEPA, the EEA will not be appended to the EIS. We do not want to give a false impression that the EEA or GAAR decision is somehow subject to NEPA. BLM does not have authority over the EEA. Review of the EEA will need to be coordinated with NPS.
ADF&G	259	Exec Sum	ES-6	610	Jason Cheney	The Executive Summary states, "Recreation and tourism are closely related to wilderness values in the area. Opportunities for solitude would be affected whether backpacking, rafting, fishing or hunting by floatplane or motorboat, or going to traditional fish camps from nearby communities. The presence of a road would alter the experience." Opportunities for solitude is one of the four characters of designated wilderness. No lands designated wilderness will be affected by any alternatives. ANILCA carefully balanced the need for conservation and development by drawing the boundaries between the two.	Critical/ Disagree	Edit the document to remove references to wilderness impacts.	Same as comment 256. See response to 256.
ADF&G	260	Exec Sum	ES-6	635	Jason Cheney	The Executive Summary states, "What are the major conclusions and findings of the analysis? PLACEHOLDER Explanation of environmentally preferred, preferred alt, LEDPA, ANILCA 810 findings etc." Major sections of the DEIS are incomplete and need to be finished before the Department can provide comments.	Editorial	The missing sections of the DEIS need to be completed and sent out for Department of Fish and Game review.	At this draft review stage BLM had not yet made a decision. BLM will review cooperating agency comments to weigh those in the decision. Due to the current schedule, BLM is reviewing the contractor draft concurrent with the cooperating agencies. For this reason BLM was not in a position to make these determinations prior to the PDEIS going out to the agencies for review. BLM expects to identify a preferred alternative by the release of the Draft, and this will conveyed to cooperating agencies when identified.
DHSS	261	Appendix N	Xii	402	DHSS	Clarify that the HIA AE-Baseline is found within this Appendix	Minor/ Suggestion	Add reference to Appendix N, Chapter 3	BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.
DHSS	262	Appendix N	Xii	409	DHSS	It is confusing to discuss ratings in the executive summary without actually presenting them. Including ratings or a reference to the ratings would be useful for those reading the executive summary	Minor/ Suggestion	Add ratings to the HEC discussion and/or add a reference to the ratings somewhere in the executive summary	BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.
DHSS	263	Appendix N	Xii	409	DHSS	It is difficult to tell from the discussion of potential impacts to food, nutrition, and subsistence, that the potential impacts could lead to both increases and decreases in food security, as well as both increased and decreased subsistence activity.	Minor/ Suggestion	Consider revising these two paragraphs to clarify the potential mixed impacts to F, N, and S.	Concur. Text has been revised. Note, BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.
DHSS	264	Appendix N	Xii	414	DHSS	Revision needed for: As described in the Subsistence Uses and Resources analysis potential impacts to access, quantity and quality (real or perceived) related to (i) construction activities, e.g., NOA and other dusts, noise, physical barriers, habitat fragmentation and competition for resources could occur.	Editorial	Suggest: As described in the Subsistence Uses and Resources, analysis potential impacts to access, quantity, and quality (real or perceived) related to construction activities (e.g., NOA and other dusts, noise, physical barriers, habitat fragmentation and competition for resources) could occur.	Concur. Text has been revised. Note, BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.
DHSS	265	Appendix N	Xii	416	DHSS	Revision needed for: Changes in diet composition, i.e., a decline in subsistence and concomitant rise in commercial foodstuffs could occur as a function of both rising incomes and access to commercial food products combined with decreased per capita subsistence.	Editorial	Suggested: Changes in diet composition, (i.e., a decline in subsistence and concomitant rise in commercial foodstuffs) could occur as a function of both rising incomes and access to commercial food products combined with decreased per capita subsistence.	Concur. Text has been revised.

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DHSS	266	Appendix N	Xii	421	DHSS	Incomplete sentence: Changes in respiratory communicable, are considered to be unlikely given the...	Editorial	Revise sentence for clarity/completion	Concur. Text has been revised. Note, BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.
DHSS	267	Appendix N	All	All	DHSS	There's many editorial comments that we chose not to make. Please consider a copy-edit review of this Appendix	Choose an item.	Correct all editorial issues (formatting, incomplete sentences, etc.)	Copy edit performed. Note, BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.
DHSS	268	Appendix N	X	318	DHSS	Clarify that this is chapter 3 of appendix, otherwise it is confusing, since Chap 3 of EIS also has affected environment information.	Editorial	Revise sentence for clarify	Concur. Text has been revised. Note, BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.
DHSS	269	Appendix N	X	340	DHSS	Provide a few examples of what these significant differences are and also consider using a different word for significant, such as substantial	Minor/ Suggestion	Revise sentence with additional information/examples on differences	Concur. Text has been revised. Note, BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.
DHSS	270	Appendix N	Xi	376	DHSS	A sentence such at this would be useful to add to relevant location in EIS 3.4.8	Minor/ Suggestion	Consider adding sentence to EIS 3.4.8 for additional clarity	Unclear comment. No change made.
DHSS	271	Appendix N	Xv	526	DHSS	Recommend adding examples of some specific mitigation strategies to this paragraph.	Minor/ Suggestion	Consider adding examples of potential mitigation strategies	Concur. Text has been revised. Note, BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.
DHSS	272	Appendix N	4	617	DHSS	This paragraph discusses why the HIA PAC footprint may be different from enviro and social PAC footprints, but does not mention if this HIA PAC foot print is different (and in which ways) or if it ended up being the same.	Minor/ Suggestion	Consider adding additional information to how/whether the HIA PAC footprint is different	Concur. Text has been revised. Note, BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.
DHSS	273	Appendix N	7	647	DHSS	Suggest moving issues and concerns covering all HECs before issues for individual HECs	Editorial	Consider moving issues and concerns covering all HECs before issues for individual HECs	No change made. Newfields indicates that "Issues and concerns covering all HECs is the compilation of all information presented in the issues and concerns by HEC."
DHSS	274	Appendix N	11	682	DHSS	Highlight Northwest Arctic Borough	Editorial	Highlight Northwest Arctic Borough	Concur. Text has been revised. Note, BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.
DHSS	275	Appendix N	93	2712	DHSS	When discussing community/resident concerns, please do not put concern in quotations; it makes their concerns seem unimportant. Added comment for this particular instance, but revise for other instances as well.	Editorial	Remove quotation marks when stakeholder concerns are mentioned.	No change made. Newfields indicates they were not able to locate the quoted material. If there's a quote under stakeholder concerns it's to reproduce what they said, it's not done in a pejorative fashion. Note, BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.
DHSS	276	Appendix N	111	3173	DHSS	Formatting of the rows in this table needs to be corrected	Editorial	Fix formatting of Table 46 (i.e., all numbers need to be centered)	Concur. Text has been revised. Note, BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.
DHSS	277	Appendix N	112	3180	DHSS	The first column for NOA impacts needs to be revised (there's a note remaining) and a footnote to define NOA should be included (since some may just look at ratings and not know what this means)	Editorial	Revise first NOA column	Concur. Text has been revised. Note, BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.
DHSS	278	Appendix N	111	3173	DHSS	Comment for all of 4.4. The thought process for the impact ratings should be presented somewhere in this chapter. Currently, there's a presentation of potential impacts, (in 4.2.1, 4.2.2, 4.2.3, 4.3.1), then tables with ratings and not explanation of the ratings. It would be useful to see how the rating selection was determined for each health impact dimension	Minor/ Suggestion	Include additional information for rating of potential impacts for increased transparency.	Concur. Text has been revised. Note, BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.
DHSS	279	Appendix N	108	3125	DHSS	Include a discussion of if potential decreased access/quality to due to a mining operation was considered	Minor/ Suggestion	Consider including a discussion of if potential decreased access/quality to due to a mining operation was considered	No change. Newfields suggests this is already described under #4, Table 43. Note, BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.
DHSS	280	Chapter 3	3-104	4490	DHSS	Clarify that these health conditions are described in Appendix N	Minor/ Suggestion	Add location reference to Appendix N	Concur. Text has been revised. Note, BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.
DHSS	281	Chapter 3	3-104	4519	DHSS	Add what these major differences are for the two regions. The paragraph appears to be focused on statewide AN trends/rates	Minor/ Suggestion	Add additional information to present the major differences in the regions of interest	Concur. Text has been revised. Note, BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.
DHSS	282	Chapter 3	3-105	4527	DHSS	Presentation of information is confusing. Remove the HEC heading. Subsequent and preceding paragraphs can be merged to save space and eliminate redundancy.	Editorial	Remove the HEC heading. Consider merging subsequent and preceding paragraph.	Concur. Text has been revised. Note, BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.

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DHSS	283	Chapter 3	3-105	4527	DHSS	Due to the minimal pages on human health, the discussion of potential impacts is extremely broad/vague and does not include any idea of actual rankings, which is necessary to obtain a sense of the potential scale of impacts and to be able to apply that to the consideration of potential mitigations, best management practices, etc.	Minor/ Suggestion	Consider expanding and restructuring the information in the health environmental consequences. A table may be the most efficient solution (can list potential impacts, which ones apply to all alternatives or just to specific ones, and ratings of impacts).	No change. Newfields indicates that Due to page limitation requirements, cross referencing is made to the Appendix N, Chapter 4 Section 4.4. Note, BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.
DHSS	284	Chapter 3	3-106	4590	DHSS	Revision needed: Long-term increases in psychosocial stress and community social cohesion...	Editorial	Suggest revising to: Long-term increases in psychosocial stress and changes to community social cohesion...	Concur. Text has been revised. Note, BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.
DHSS	285	Appendix N	108	3113	DHSS	The potential environmental impacts of road construction (including NOx and fugitive dust) are addressed; however, effects on air quality from NOx, SOx, CO, and PAHs from construction machinery don't appear to be included here (I assumed transport was included in the term "mining activities" rather than road construction). Because of the high prevalence of respiratory illnesses already present in the PACs, it seems reasonable to consider the potential impacts of these pollutants. This is particularly important given the lack of ventilation in many buildings in these communities. Additionally, NOx can cause acidification of nearby waterbodies, which are important spawning grounds for migratory fish that serve as key subsistence resources in the region.	Minor/ Suggestion	Add a discussion of additional pollutants, aside from NOA, (such as NOx) to support the rating of relevant potential impacts.	The comment is assumed to refer to mining construction activity. Newfields indicates that this issue was raised in the cumulative impact and HIA workshops and the decision was that air modeling was not going to be performed at this time. This would be part of a specific mining project application and would be addressed then.
DHSS	286	Appendix N	108	3113-3124	DHSS	Potential exposure to hazardous materials in relation to shale and oil development projects (outside of Alaska) are discussed, but some data is also available on the contribution of contaminants from large scale mining activities to the environment, including Red Dog Mine. For example, blood and liver Pb concentrations in small animals in the vicinity of the DeLong haul road corridor were ~ 20 x those at reference sites (Cd was 3x higher). Mosses also reflected increased Pb and Cd deposition associated with ore truck traffic. Furthermore, the Public Health Impacts observed in First Nations and Aboriginal subsistence communities in proximity of the Alberta Oil Sands Development may have more relevance than some of the examples included (Texas, Arkansas, Pennsylvania), particularly in areas with surface extraction of Bitumen.	Minor/ Suggestion	Consider including (and referencing) literature on research related to hazardous materials from Red Dog and Alberta Sands and revise ratings, if necessary.	Concur. Information added. Note, BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.
DHSS	287	Appendix N	108	3113-3135	DHSS	Studies in the Alberta Oil Sands region show that melting snowpack can significantly increase loading of metals and Polycyclic Aromatic Hydrocarbons to watersheds, resulting in contamination of aquatic ecosystems that are located considerable distances from natural resource development activities. Although introduction of hazardous materials to aquatic ecosystems is mentioned in several places in the appendix, the contribution from melting snowpack is not discussed. The importance of this route of contaminant export from the immediate vicinity of natural resource development projects is increasingly being recognized. Consider discussing the potential impacts of this route of exposure on populations of important subsistence fish species, particularly with respect to reproductive success and survival of offspring (as important spawning grounds for migratory fish are located in the PAC).	Minor/ Suggestion	Consider reviewing suggested studies and including the contribution of PAHs from melting snowpack in the discussion of impact rating and adjust rating, if necessary.	The "contaminant export from the immediate vicinity of natural resource development projects" is an indirect and cumulative impact and to the extent it is known, is discussed in Appendix H. Because no mining application is pending, the information available is limited. The details requested by DHSS would be better addressed if/when mining proposals with the kind of detail request would be available. Note, BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.
DHSS	288	Appendix N	108	3116, throughout	DHSS	Effects of perceived contamination can be just as detrimental to subsistence communities as actual contamination. This point is somewhat implied, but would benefit from a clearer statement of the potential impacts for a reader who is less familiar with this topic.	Minor/ Suggestion	Add additional discussion of the effects of perceived contamination for clarity	Concur. Information added. Note, BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.

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DHSS	289	Appendix N	84	2432-2433	DHSS	Older individuals are also more likely to practice traditional diets. Multiple studies have shown a relationship between declining subsistence food consumption and increasing mental health disorders.	Minor/ Suggestion	Consider adding the point that people over 65 reporting fewer mentally unhealthy days may be related to increased subsistence lifestyles	Concur. Information added.
DHSS	290	Appendix N	52	1567-1570	DHSS	It should be stated that this is the prevalence among children who were tested, not the population in general. The testing rate varies considerably by region, but can be quite low overall. The % of children tested per DHSS/CDC recommendations (2018) in YK was 1.9%, and NAB 18.3%.	Factual Error	Correct data in sentence.	Newfields indicates the data can be added if DHSS supplies the referenced document. Note, BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.
OHA	291	Chapter 3	3-109	4714-4717	Meitl	This sentence is not accurate on how determinations of NRHP eligibility are done.	Factual Error	Separate the process from the general characteristics of historic properties. The process description should reference 36 CFR 63 and mention the ability for the lead agency and the appropriate SHPO/THPO to come to a consensus determination for NRHP eligibility for the purposes of Section 106. The SHPO does not make determinations of NRHP eligibility.	Concur. Text has been revised.
ADEC	292	Choose an item.	ES-5	582	Gary Mendivil	Sentence talks about “use of gravel asbestos-affected gravel”	Editorial	Remove first use of the word gravel from the sentence.	Concur. Text has been revised.
ADEC	293	Chapter 3	3-5	187	Gary Mendivil	Please spell out “Naturally Occurring Asbestos” the first time it appears in the section to avoid making the reader look is up.	Editorial		Concur. Text has been revised.
ADEC	294	Chapter 3	3-26	1095	Gary Mendivil	This sentence notes that “The closest population center, the Fairbanks North Star Borough (FNSB), is managed in its own Air Quality Control Zone (AQZ) established by the FNSB Assembly.” It would be more appropriate say “The closest population center is the Fairbanks North Star Borough (FNSB), which is designated by the EPA in 40 C.F.R. 81.302 as nonattainment for particulate matter less than 2.5 microns in diameter for the 24-hour National Ambient Air Quality Standards (NAAQS) with its air pollution managed under a State Implementation Plan.”	Editorial	While the FNSB continues to implement certain aspects of air quality, ADEC is now implementing most of the regulatory program in the Air Quality Control Zone.	Concur. Text has been revised.
ADEC	295	Chapter 3	3-26	1098	Gary Mendivil	The sentence regarding the PM 2.5 24-hour design value trending down to meet the NAAQS is somewhat misleading. The design value in North Pole is higher than in downtown Fairbanks and there is newer data available. Additional information can be found here: http://dec.alaska.gov/air/anpms/communities/fbks-particulate-matter/	Factual Error	The EPA reclassified the FNSB nonattainment area as a “Serious” Area with an effective date of June 9, 2017. This sets a new deadline for bringing air quality into compliance with the federal Clean Air Act. http://dec.alaska.gov/commish/press-releases/19-03-dec-and-fairbanks-north-star-borough-announce-update-on-air-quality-plan/	Deleted sentence per comment # 155
ADEC	296	Appendix N	xii	411	Gary Mendivil	This sentence reads “Increased economic benefits could decrease the number of food-insecure households, as there would be more disposable income to buy commercial food products.” The word “by” should be replaced by the word “buy” in this sentence.	Editorial		Concur. Text has been revised. Note, BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.

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ADEC	297	Appendix N	xiv	479	Gary Mendivil	This sentence reads “There is a perception by community members that future mining activities, regardless of whether state and federal standards are met, will result in significant release of toxic metals to local soils and rivers with flora and fauna uptake with adverse health impact.” This statement appears to imply that state and federal environmental standards are not protective of human health. Please add a sentence that notes educational efforts and materials could be developed to mitigate this concern.	Editorial	Please consider adding information that could mitigate this concern, such as providing information or education on the hazards and risks of hazardous materials, such as mercury or asbestos and how to avoid them. The HIA toolkit methods include recommendations tied to the most important impacts.	The BLM is comfortable with the language stating the perception exists in area communities and does not believe such a perception implies that environmental standards are somehow failing to protect human health. The BLM agrees that education could help alleviate anxiety or perceptions that may be unfounded. However, education as a stipulation would be most appropriate in relation to a mining EIS and mining permits and is outside the scope of this road EIS. Note, BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.
ADEC	298	Appendix N	68	2110	Gary Mendivil	This sentence reads “ A “served” community is one in which more than 55percent of homes are served...” The word “percent” should be replaced by the word “percent” in this sentence.	Editorial		Concur. Text has been revised. Note, BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.
ADEC	299	Appendix N	P-0	3296	Gary Mendivil	The discussion of water and sanitation sites to ADEC 2016, but no reference is provided in the list of references provided in the following pages.	Editorial	Please include citation.	Concur. Information added. Note, BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.
ADNR	300	Chapter 2	2-5	Last complete sentence.	D. Leinberger, J. Proulx	Recommend removal of the reference to “access control similar to the Dalton Highway’s access to the North Slope oil fields”. It is our understanding that oil field operators allow local residents access through the NS oil fields. While access is controlled, it does allow for some public access. This is different than what AIDEA proposes for the Ambler Road. Additionally, access control/security gates for the North Slope oil fields are located beyond the end of the Dalton Highway itself. Access control plan for the Ambler Road should be more clearly defined, to include and clarify both physical manner of security/control mechanisms, as well as the specific types/use of access anticipated.	Minor/ Suggestion		This text has been updated.
ADNR	301	Chapter 2	2-6	Para. 1, 3rd comp. sentence.	D. Leinberger	As written it says, “Only authorized and commercially licensed drivers would be allowed to drive the road.” Assuming this is a safety issue and not a way to determine what is commercial use, we recommend adding the bolded language, “To address safety issues only authorized and commercial licensed driver would be allowed to drive the road.”	Minor/ Suggestion		This is not a mitigation measure designed specifically to resolve safety issues. It is part of the proposal and is multi-faceted, including protection of area communities and their subsistence lifestyle. This section is describing what is proposed, not the reasons why and the impacts, which are addressed in Chapter 3. No change has been made.
ADNR	302	Chapter 2	2-6	Airstrips	D. Leinberger	Recommend clarifying if airstrips will be private and for industrial/commercial use only and if they will be reclaimed at end of project, 50 years.	Minor/ Suggestion		Concur. Text has been revised.
ADNR	303	Chapter 2	2-7	Project Lifespan	D. Leinberger	As written it says, “AIDEA proposes to reclaim the road and anticipates that would occur at the end of the 50-year ROW authorization, or when mineral exploration and development activities in the District conclude.” Recommend adding information about when AIDEA will submit their reclamation plan for road and facility removal and reclamation, and who they anticipate will be responsible, AIDEA or the mine operator at end of mine life.	Minor/ Suggestion		Concur. Text has been revised.
ADNR	304	Appendix H	H-2	810	D. Leinberger	Recommend adding bolded language to the following sentence, “AIDEA proposes that communities would be allowed to use the road for delivery of commercial goods, though this ultimately depends on the authorization issued by the land management agency.”	Choose an item.		The entire proposal and every component within it ultimately depends on the authorization issued by the land management agency(ies). It does not appear warranted to call that out separately here. See also response to 305.
ADNR	305	Appendix H	H-22	822	D. Leinberger	Recommend adding a sentence after quote from AIDEA application, “Commercial uses will be defined prior to ROW issuance to ensure equitable implementation of this provision.” Or something similar. Asserting the road is industrial use only and not open for public use, but open for “commercial uses” is problematic unless they more clearly define commercial use. Tourism is a commercial use.	Minor/ Suggestion		Section 2.2.2 of App. H describes the commercial access scenario in detail. The road is not proposed to be open for tourism or transport of people in general but for commercial delivery of goods. This is spelled out in 2.2.2.

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ADNR	306	Appendix H	H-22	822	D. Leinberger	Recommend adding a line (bolded language below) after quote from AIDEA application, "Any permit process developed would require approval from the appropriate land management agency."	Minor/ Suggestion		See response to 304. If, by these comments 304-308, DNR is suggesting that it would have different provisions where the road crossed state lands, as a cooperating agency for this EIS those provisions should be provided to BLM.
ADNR	307	Appendix H	H-23	876	D. Leinberger	DMLW NRO would assert that individual miners conducting mining operations are commercial operators.	Critical/ Disagree		As indicated in the text, this is not what AIDEA has proposed. The road is not proposed to be open to all commercial uses; rather, it is proposed just to allow the delivery of goods, and by commercial operator only. Changes have been made in text to remove the reference to "DNR has the authority..." in the Background from AIDEA subsection. The intent of this subsection is to present AIDEA's proposal, not to indicate exactly how that intent would be implemented. The BLM acknowledges that each landowner needs to make decisions regarding use and access to its lands independently. See also related issues at comment 327.
ADNR	308	Appendix H	H-32	873-876	D. Leinberger, J. Proulx	Recommend removal. Access along Pogo Road is in fact restricted, but DNR does authorize some activities not directly related to "large-scale commercial mining operations." The two roads, Pogo and Ambler, and their uses are not completely comparable. For example, half of Pogo road, though currently restricted, will be open to the public after mine life. The other half is issued to the as a private road which is proposed to be removed at the end of mine life.	Editorial		This paragraph is intended to clarify as much as possible what AIDEA is actually proposing. Deleting it would reduce the clarity of the proposal. However, the phrase "to approved large scale commercial mining operations" in the quote has been replaced with ellipses to minimize the impression that the Pogo Road is solely for large scale mining. The sentence reads "DNR has the authority to limit use of the road...., as was done with the Pogo (Mine) Road."
ADNR	309	Appendix H	H-23	883	D. Leinberger	Recommend the sentence include the bolded language, "AIDEA's road operator would have authority to allow drivers access under limited terms and with land management agency concurrence —vehicles associated with..."	Minor/ Suggestion		As with comment immediately above, the entire proposal is subject to land management agency concurrence. It is anticipated the concurrent addressed in this bullet would occur at the time of ROW authorization. As noted in the next bullet, land management agencies could authorize other uses of the road separately.
ADNR	310	Appendix H	H-23	893	D. Leinberger	Recommend the sentence be amended as follows, "Landowners issuing such authorization would coordinate with the AIDEA and its road operator, though concurrence would not be required. All drivers would be required to follow AIDEA road safety requirements."	Minor/ Suggestion		Concur. Text has been revised.
ADNR	311	Appendix H	H-23	894	D. Leinberger	Recommend removal of this sentence, "This would be a commitment of the agencies authorizing the AIDEA right-of-way." DNR cannot commit to this prior to going through our own adjudication process.	Critical/ Disagree		Concur. Text has been revised.
ADNR	312	Appendix H	H-24	922	D. Leinberger	Recommend the following change, "It is reasonably foreseeable that, if the road was open to commercial deliveries:" Change "once" to "if."	Minor/ Suggestion		The aim of section 2.2.2 is to set the scenario of reasonably foreseeable action based on what AIDEA has proposed. AIDEA has proposed such commercial delivery access and therefore it is reasonably foreseeable.
ADNR	313	Appendix H	H-27	1046	D. Leinberger	After "connection to the fiber optic line" recommend adding the following sentence, "Any non-industrial use may require additional authorizations from land management agencies."	Minor/ Suggestion		Concur. Information added.
ADNR	314	Appendix H	H-27	1058-1059	D. Leinberger	Recommend adding the following sentence at the end, "A responsible entity would need to be identified and approved prior to AIDEA's relinquishment of their interest in the road and related facilities."	Minor/ Suggestion		The current last sentence of 2.2.3 Fiber Optics has been deleted as inconsistent with the rest of the document and too speculative. It had read "The result is likely to be that the road remains open for commercial deliveries and for maintenance of the fiber optic service." Without that sentence, the suggested sentence no longer appears to apply. No change made.
ADNR	315	Appendix H	H-54	2083-2084	J.Proulx	Recommend removal of the last sentence, or at least the section of sentence which states "None of this is likely foreseeable at this time".	Choose an item.		The last four sentences of the paragraph have been deleted.
ADNR	316	Appendix H	H-63	Cost of Living, para. 1	J.Proulx	Recommend revising (via adding bolded language) the first sentence to say "...controlled access during operation, and depending upon final authorization type and terms issued by the underlying land owner, the study area communities..."	Choose an item.		Concur. Text has been revised.

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ADNR	317	Appendix H	H-65	2524-2526	D. Leinberger, J. Proulx	The documents states, "The Ambler Road is not proposed to allow transportation of people from outside the region or between communities within the project area, either by private vehicle or via some form of commercial or public transit." We recommend adding the following sentence after, "While the road is not proposed to allow people from outside the region to use the road outside the identified industrial use, a commitment by State of Alaska DNR to limit the use based on residency, prior to evaluation and under and completion of State statutorily required authorization issuance process is not feasible or practical."	Critical/Disagree		The beginning of the paragraph in question has been revised to minimize the wrongful impression that restrictions on the road would occur based on area of residence. This is not the case. It is proposed to be closed to the public entirely. Regarding the proposed additional language, there are apparently typos that make DNR's intent somewhat unclear. In any case, this Socioeconomics section does not appear to be the appropriate place for this kind of statement. A sentence has been added in 2.2.1 of Appendix H and at the end of 2.4.1 of EIS Chapter 2, indicating that DNR has stated it "must separately evaluate questions related to use of the road and restrictions on use and cannot commit at this time regarding restrictions where the road would cross State of Alaska lands."
ADNR	318	Appendix H	H-65	2526-2529	D. Leinberger	Recommend rewriting to be consistent with above recommended change.	Critical/Disagree		See response to 317
ADNR	319	Appendix H	H-66	2540	D. Leinberger	Recommend the bolded language be added, "In addition, a road connection could provide improved access to gravel sources for each community, provided those communities developed spur road access to the industrial road."	Minor/Suggestion		The sentence has been revised. The language is similar to the proposed. However it acknowledges that Kobuk would be connected by road under all alternatives.
ADNR	320	Appendix H	H-67	2603	D. Leinberger	Recommend adding the bolded language after "... low-income population, provided the road allowed for commercial delivery of fuel and supplies."	Minor/Suggestion		Concur. Text has been revised.
ADNR	321	Appendix H	H-70	2740-2741	D. Leinberger	Recommend adding the bolded language to the sentence, "The currently proposed road is a private-access road but could potentially also incrementally introduce elements of a publicly accessible road including increased access to and decreased costs of goods such as food and equipment."	Minor/Suggestion		The sentence in section 3.5.7, Subsistence, has been revised to eliminate the phrase 'publicly accessible' to avoid confusion about public access on the road. Changing would to could has not occurred. This is the evaluation of experts about what would be expected to happen given the scenario presented. Unless there is a flaw in the analysis, it is not expected to be a 'maybe.' Other revisions have been made in 2.2.2 under Commercial Deliveries Scenarios--All Alternatives.
ADF&G	322	Chapter 3		2459	Parrett	Wolverines kill adults too; this reference does not really address the topic.	Factual Error	Just remove references; not very relevant.	No change made. Reference cited includes statement made in text. Statements are supporting information regarding sources of mortality of caribou.
ADF&G	323	Chapter 3		2464	Parrett	Should cite this as a product of a harvest model with a great deal of uncertainty in the predictive outputs (Sutherland 2005, modified by A. Craig)	Editorial	If harvest is important, add reference and more detail on how the number is arrived at.	Statement made is simply to provide context for current harvest levels. Removed the number but left the percentage to make less precise.
ADF&G	324	Chapter 3		2467	Parrett	Boat use is summer only	Factual Error	Add other seasonal modes.	Added snow machine in winter by subsistence hunters.
ADF&G	325	Chapter 3		2468	Parrett	Hunting by non-locals did appear to go through an increase that then stabilized/declined in association with some regulatory changes and national economic downturn; at any rate, is not continuing to increase	Factual Error	Get numbers on non-resident hunting from ADFG.	Added "then stabilized or declined due to regulatory changes and national economic downturn."
ADF&G	326	Chapter 3		2472	Parrett	Fullman's paper is not explicitly about effect on local hunters; it is about caribou distribution and movements at a large scale, and in relation to reported non-local hunting activities. What they cannot address is smaller scale effects in time and space, which could affect both local and non-local hunters.	Editorial	Clarify in text.	Clarification was already included in text: "although fine-scale or short-term responses may be altering availability of caribou to local hunters"
ADF&G	327	Chapter 3		2475	Parrett	Moss is probably not a preferred food item, it just shows up in fecal microhistology because it is nearly indigestible.	Factual Error	The major point is that lichen is important to most caribou populations; leave it at that.	Removed "followed by moss and shrubs as the next most preferred forage types".
ADF&G	328	Chapter 3		2497	Parrett	ADFG has monitored radio collars since 1979	Factual Error	change	Concur. Text has been revised.
ADF&G	329	Chapter 3		2499	Parrett	Listing just weather and lichen is not appropriate without eliminating all of the other myriad alternative hypotheses.	Editorial	Add other causes, or just say reasons for decline are uncertain, and could be a combination of....	Concur. Text has been revised.
ADF&G	330	Chapter 3		2508	Parrett	Another very plausible reason for the spike in adult female mortality we have observed is that the sample is aging rapidly due to the lack of new collars deployed in recent years	Editorial	Remove reference to single year mortality event, or add clarifying language.	No change made. Text does not reference an observed increase in mortality but rather predicts it due to severe winter weather. See reference for supporting information.
ADF&G	331	Chapter 3		2566	Parrett	These are temporally and spatially focused, and somewhat old references to cite for winter distribution.	Editorial	Look at Dau's management reports for long-term data on winter range use.	Added reference to K. Joly winter distributions. Text is simply identifying other areas winter caribou have been observed and it is consistent with data from Joly.

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ADF&G	332	Chapter 3		2623	Parrett	Muskox are infrequent in the area, but not absent. They have been seen in the community of Ambler, and near Kobuk. The closest "resident" ok are probably in the upper Noatak, and not Cape Thompson.	Factual Error	Make comment about muskox less declarative.	Concur. Information added.
ADF&G	333	Chapter 3		2683	Parrett	It is important to note that these kernels are poor representations of herd distribution, and more representations of individual animals due to pseudo replication in the analysis dataset. Using multiple locations for single individuals leads to severe autocorrelation, particularly during seasons with low movement rates.	Critical/ Disagree	The analytical methods are flawed, and the representations should not be used for this purpose.	The purpose is to display the best available data. This data is used in combination with and not as a replacement of the very coarse ADF&G range maps. Please refer to Appendix E, Table 20. Changed "determine" to "approximate". If ADF&G has better data to consider, please provide it.
ADF&G	334	Chapter 3		2685	Parrett	These kernels are not "more refined." They are smaller in size because of the pseudo-replication/autocorrelation that is present when the data is used to represent the herd, as opposed to the individual. These analyses are not appropriate for this usage, particularly during seasons with low movement.	Critical/ Disagree	Same as above.	Removed "more refined" statement and replaced with "show smaller ranges because the data is based on a smaller number of individuals and years".
ADF&G	335	Chapter 3		2710	Parrett	Lines 2710-2714 should be placed into the context from which they were derived; calving was most sensitive among the seasons examined, which are restricted to summer.	Editorial	Adjust text to reflect.	Added "summer" in parentheses.
ADF&G	336	Chapter 3		2747	Parrett	Similar to the 40-mile, the Nelchina crosses multiple roads annually.	Editorial	Add Nelchina; various references possible.	Added Nelchina.
ADF&G	337	Chapter 3		2777	Parrett	'Should be stated that use of the Seward Peninsula appears to be decreasing; much like caribou eventually ceases regular use of the Nulato Hills, they appear to be moving to new wintering areas, especially in the Brooks Range north of the study alternatives.	Editorial	Add text.	Added: "However, it appears that winter abundance is shifting towards the Brooks Range and other areas north of the project area (L. Parrett, personal communication 2019).
ADF&G	338	Chapter 3		2800	Parrett	'Should be stated that moose benefit from habitat disturbance (riparian erosion/accretion, fire), which is why we have to hydrox near roads. Maier also showed that moose densities were higher near communities, ostensibly due to predator relief and/or anthropogenic habitat disturbance.	Editorial	Add text	Added " Habitat disturbance can be beneficial to moose as it increases early successional browse availability.
ADF&G	339	Chapter 3		2907	Parrett	'These data should be used with caution. The study was not intended to evaluate the question of crossing, and one reason most crossings are east of the John is because that is where the study took place. Making inference based on habitat use patterns is appropriate, but raw data on crossings is biased toward the capture sites for these non-migratory/short migrant moose.	Editorial	Consider not using crossing rates, but habitat preferences instead.	Removed text as suggested.
ADF&G	340	Chapter 3		2917	Parrett	'Same issue as with the moose; bias in study location and capture locations are an issue relative to inference possible here. Again, speaking to habitat preferences might be more appropriate.	Editorial	Consider not using crossing rates, but habitat preferences instead.	Removed reference to location of grizzly bears to avoid spatial influence of study.
ADF&G	341	Appendix E	1	59	Brendan Scanlon	Very last sentence in Brooks Range Ecoregion description, recommend adding Dolly Varden after Arctic grayling.	Minor/ Suggestion		Added Dolly Varden to sentence.
ADF&G	342	Appendix E	1	59	Brendan Scanlon	Under Kobuk Ridges and Valleys section, statement about region having "short, cool summers" is not quite accurate. Average high temp in July in Ambler is just over 71 degrees, and it gets over 80F every summer. Can be one of the warmest areas in the state in the summer.	Minor/ Suggestion		No change. Description taken from BLM source: Boucher et al. 2016. CY REA Final Report. The Ecoregions were delineated and defined by Nowacki et al. 2001 and definitions within the CY REA were taken directly from this source. This exact definition is also used in ADF&G's Wildlife Action Plan.
ADF&G	343	Appendix E	15	169	Brendan Scanlon	In Table 16, under the heading "Considerations Species to the Study Area", I would add commercial fishery target to chum salmon and sheefish.	Minor/ Suggestion		Concur. Text has been revised.
ADF&G	344	Appendix F	3	87	Brendan Scanlon	In Table 5, I would change the "yes" under commercial barge service for Ambler, Shungnak, and Kobuk to "not consistent service". Barge is very dependent on water levels and the Kobuk can be pretty skinny with long stretches between successful barge trips.	Minor/ Suggestion		Concur. Text has been revised.
ADF&G	345	Appendix F	5-6	141	Brendan Scanlon	In Table 9 regarding employment of NAB and YKCA, Federal government is not listed as an Industry. Is there really no Federal employees in these areas?	Minor/ Suggestion		Added table footnote explaining federal workers are not included in the ADOLWD database.

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ADNR	346	General Comments			Faith Martineau	Hi Tina, You may please find attached the State's comments on the pDEIS. I am transmitting as provided by the reviewers, without edits, because the cooperating agency review period did not provide sufficient time for internal vetting when combined with other concurrent requests for review on federal actions. We're all stretched thin - we'll continue to do the best we can to be responsive; however, I anticipate that many of the State's concerns will need to be addressed when the Draft is published in the Federal Register for public comment.			Thank you for your comments. BLM welcomes additional comments during the public review period.
ADNR	347	General Comments			Faith Martineau	• Division of Mining, Land and Water, Northern Regional Land Office (NRO), objected strongly to the language describing how the State will condition future permit authorizations – primarily regarding access. I confirmed that they are not requesting that BLM modify its assumptions as we all understand that the Ambler Road will be used for private industrial access, but rather that BLM remove any descriptions that create an appearance of predecisionality for State permits for which applications have not yet been submitted.			See responses to comments 307 and 327.
ADNR	348	General Comments			Faith Martineau	• It was not clear to the Department of Fish and Game (ADF&G), which agency has participated throughout the NEPA process, that a new alternative would be developed well after the public scoping meetings. Alternative C received little public input since it was developed during Cooperating Agency meetings after public scoping. ADF&G feels that the Alternative C route represents a new proposal, not an alternative, because the issues are substantially different. The intersection of Alternative C with the Dalton Highway is more than 100 miles from Alternatives A & B, and there are considerably different habitat and wildlife considerations between the A/B and C routes.			DNR has participated as the state lead agency and has been responsible for coordination amongst other state agencies. DNR has been present at most meetings. ADF&G has also had a representation at many cooperating agency meetings and at the meetings/workshops where Alternative C was screened. It is quite common in NEPA for an agency to go through scoping with the proposed alternative (one proposed by an applicant or one that an agency wants to build that came out of a plan for instance) and then to evaluate and fully describe impacts of reasonable alternatives. Soliciting alternative ways of meeting the purpose and need is part of the purpose of scoping.
ADNR	349	General Comments			Faith Martineau	• The GAAR EEA is referenced in the Executive Summary, however when will it be available for SOA review? Inclusion of this document in the Ambler DEIS would be useful as it will be adopted by reference.			NPS has said the document will be available for concurrent review with the draft EIS. Because the GAAR decision is not subject to NEPA the EEA will not be appended to the EIS. We do not want to give a false impression that the EEA or GAAR decision is somehow subject to NEPA. BLM does not have authority over the EEA. Review of the EEA will need to be coordinated with NPS.
ADNR	350	General Comments			Faith Martineau	• In the Executive Summary the major conclusions and findings of the analysis are incomplete (it says PLACEHOLDER). Will the SOA see this section before it goes out for public review?			At this draft review stage BLM had not yet made a decision. BLM will review cooperating agency comments to weigh those in the decision. Due to the current schedule, BLM is reviewing the contractor draft concurrent with the cooperating agencies. For this reason BLM was not in a position to make these determinations prior to the PDEIS going out to the agencies for review. BLM expects to identify a preferred alternative by the release of the draft EIS, and this will be conveyed to cooperating agencies when identified.
ADNR	351	General Comments			Faith Martineau	• Before this DEIS is distributed to the public, it may be important to provide definitions of some terms such as watch list and invasiveness potential in the appendix tables. For instance, what is the difference between "highly" and "moderately" invasive (Appendix E, Table 8). Let's discuss – I'm at DNR's Executive Leadership Summit all day today but have availability later this week.			Additional note added to Table 8 footnotes to clarify definition of Invasiveness Rank, etc. Changed heading in Table 8 from "Invasiveness potential" to "Invasiveness Category". Could not find a BLM definition for "watch list" or "sensitive species" - no definitions added to Table 7 for these terms.
NPS	352		Vol 1 pg 3-102	4390	JD, NPS	I thought the sheefish spawning habitat on the Reed was upstream of the Alt B alignment. Since degradation and contamination is a downstream effect that would make Alt A have a higher potential	Factual Error		No change; sheefish spawning habitat is located downstream of Alt A and Alt B. Alt B crosses the Reed about 7 miles upstream from the sheefish spawning habitat.

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NPS	353		Vol 1 pg 3-83	3573-3581	JD, NPS	Alt A is approximately 2 ½ miles from Walker Lake. Walker lake is the primary access point for visitors to in this part of GAAR. The road, and specifically dust plumes from traffic on the road will be visible from the vicinity of the lake. Visitors spend more time here as they prepare for a trip on the Kobuk WSR or engaged in other activities than they do in the vicinity of the Alt B alignment. The duration of exposure and visibility of the road for Alt B is limited to the time required to float past it compared to time spent camping within visual range of the road on Alt A.	Factual Error		Concur. Information added.
NPS	354		Vol 1 pg 3-78	3364-3494	JD, NPS	'Nice job on this section	Editorial		Comment noted.
NPS	355		Vol 1 pg 3-75		JD, NPS	'The important thing here is not the separation between the two alignments (7 miles), but the separation between the alignments and the alignments and the park boundary. It is a matter of how close or how far each alignment is from designated wilderness. Alt A bumps along the wilderness boundary for miles and in one place comes within 200 yards of it. Alt B is 7+ miles away and has topographic features that further enhance the separation.	Critical/ Disagree		Clarification added.
NPS	356		Vol 1 ES-5	576-578	JD, NPS	'NPS and DOWL collected soil temperature data in the two alignments in GAAR and found the temperature of the permafrost to be -1Deg C or warmer so I(doubt the soil temps could be much warmer than that on Alt C. It is probably better to say that the permafrost under all three alternatives is lightly frozen and susceptible to disturbance and thaw. See "Summary of Ground temperature Observations in the Kobuk Preserve Unit, Gates of the Arctic National park and Preserve, 2014-2016"	Critical/ Disagree		Concur. Text has been revised.
NPS	357		Vol 1 pg 2-2		JD, NPS	'In the paragraph on Alt B, change "dovetails with ..." to "is consistent with ..."	Editorial		Concur. Text has been revised.
NPS	358		Vol 1 pg 2-3		JD, NPS	'Public Access road paragraph: As noted on the next page, what is being proposed and what we will be permitting is a 2 Lane 32 foot wide all season road. So it is disingenuous to say the road is too narrow to be safe for public use. It is only the initial buildout that is a narrow road.	Critical/ Disagree		The bridges will only be one lane. The road is not being designed with the same site distances that would be built into a public road. Drivers will need special training, carry radios, etc. For these reasons the road is not safe for public use. We do not say the road is too narrow for public use. Please see Section 2.4.3 of the EIS.
NPS	359	chapter 1	1-2	66	Elmer	insert starting with ad seasonal use single-lane.. the gravel is permanent the ice and use is seasonal			The applicant has not proposed an "ice road." No change made. See project description in Chapter 2 or the applicant's SF 299.
NPS	360	chapter 1	1-2	57-59	J. Rasic	DEIS reads: "Instead, ANILCA directs the Secretaries of the U.S. Department of the Interior (DOI) and U.S. 57 Department of Transportation (USDOT) to jointly prepare an Environmental and Economic Analysis 58 (EEA) to determine the route through GAAR."			Concur. Text has been revised.
NPS	361	chapter 1	1-2	57-59	J. Rasic	Replace with: "Instead, ANILCA directs the Secretaries of the U.S. Department of the Interior (DOI) and U.S. 57 Department of Transportation (USDOT) to jointly prepare an Environmental and Economic Analysis 58 (EEA) to determine the route through GAAR and develop terms and conditions for issuance of the NPS right-of-way permit."	Factual Error		Concur. Text has been revised.
NPS	362	chapter 1	1-3	89	Elmer	insert ... grant that provides for applicants purpose of:	Factual Error		BLM's purpose and need has been reviewed and approved. Cooperating agencies have had input into BLM's purpose and need. No change made.
NPS	363	chapter 1	1-5	188	Elmer	If reference a number of webpages- insert them. Do not make the public search for them	Minor/ Suggestion		The appropriate webpage is included in this paragraph. The text has been revised for clarity.
NPS	364	chapter 1	1-4	151	Elmer	if 52 went out , how many responses were received	Minor/ Suggestion		BLM does not think it is necessary to include how many response letters were received. Ongoing consultation is occurring as tribes request, as included in Appendix I. No change made.
NPS	365	Chapter 2	2-3	??	J. Rasic	DEIS reads: "Alternative B: AIDEA Alternative Route (GAAR South) to the Dalton Highway."			changed to "Alternative B: AIDEA Proposed Alternative Route (GAAR South) to the Dalton Highway" to address comments below

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NPS	366	Chapter 2	2-3	??	J. Rasic	DEIS: "Alternative A: AIDEA Proposed Route (GAAR North) to the Dalton Highway. This alternative is the applicant's proposed route."	Factual Error		See Comment 365
NPS	367	Chapter 2	2-3	??	J. Rasic	Replace with: "Alternative A: AIDEA Proposed Route (GAAR North) to the Dalton Highway. This alternative was proposed by the applicant and is their preferred alternative across NPS lands."	Factual Error		No replacement made. We feel this was clarified with change made under Comment 365
NPS	368	Chapter 2	2-3	??	J. Rasic	A key point is that both Alternatives A and B were developed and proposed by AIDEA in their SF-299 permit application. Among the two alternatives across NPS lands they prefer Alternative A.			See Comment 365
NPS	369	Chapter 2	2-3	??	J. Rasic	DEIS: "However, AIDEA did not request a public road."			See Comment 370
NPS	370	Chapter 2	2-3	??	J. Rasic	Replace with: "However, AIDEA did not propose a publicly accessible road in their permit application or as part of the 50 year term of the ROW."	Factual Error		Changed text to: "However, AIDEA did not propose a publicly accessible road in their permit application."
NPS	371	Chapter 2	2-3	??	J. Rasic	This more specific statement restricted to the SF-299 is accurate and avoids conflict with various public statements that AIDEA has made indicating openness to allowing public access.	Factual Error		See Comment 370
NPS	372	Chapter 2	2-3	2.4.1	Elmer	Clarify these are applicants proposed routes and not in response to any NPS guidance	Factual Error		The text does not imply these alternatives are in response to NPS guidance.
NPS	373	Chapter 2	2-3	public access	Elmer	move the public access paragraph is to actions dismissed and not further analyzed	Critical/ Disagree		Moved as suggested.
NPS	374	Chapter 2	2-3		J. Rasic	Replace with: "Alternative B: AIDEA Proposed Alternative Route (GAAR South) to the Dalton Highway.	Factual Error		See Comment 365
NPS	375	Chapter 2	2-4	??	J. Rasic	Section 2.4.3, "Access" heading. Suggest including a statement that any other uses of the road beyond the scope of AIDEA's purposes to support the Ambler Mining District would require additional permitting and compliance review by BLM. This would address the potential for parties interested to access to mining areas outside of the Amber Mining District.	Factual Error		This suggested revision may or may not be true, but the determination regarding additional permitting could not be made until a proposal was submitted to BLM to be evaluated.
NPS	376	Chapter 2	2-4	??	J. Rasic	DEIS: "staffed gatehouses would be in place at each end of the road."	Factual Error		See Comment 377
NPS	377	Chapter 2	2-4	??	J. Rasic	Suggest including some statement about whether other commercial or industrial uses of the road would require permitting by BLM, SOA, NPS, etc. As it stands an AIDEA-staffed guardhouse seems like the only control on use of the road.	Minor/ Suggestion		No change made. BLM conducts compliance inspections to ensure that permitted activities are conducted in compliance with their authorization.
NPS	378	Chapter 2	2-7	project lifespan	Elmer	Is reclamation analyzed as part of action? too far in advance at 50 years? would require at a minimum current reclamation approach in a proposed reclamation plan	Minor/ Suggestion		This information is based on the best information at this time. As part of AIDEA's plan of development, they will have provide a reclamation plan to BLM for approval.
NPS	379	Chapter 3	3-2	global	Elmer	is organization parallel to EEA	Minor/ Suggestion		There is no requirement to make organization in the EIS and NPS' EEA.
NPS	380	Chapter 3	3-4	159	Elmer	insert there would be no additional changes to the affected	Editorial		Concur. Text has been revised.
NPS	381	Chapter 3	3-8	306	Elmer	Confirm this is consistent with NPS analysis	Factual Error		This may be an NPS internal note. No inconsistency is known. If NPS has further comments, the BLM welcomes them.
NPS	382	Chapter 3	3-9	366	Elmer	Ensure outline headers consistent. Hazardous waste may be part of the affected environment conditions but it is not a resource that is impacted via NEPA. I could be a threat	Editorial		See Comment 383
NPS	383	Chapter 3	3-9	366	Elmer	haz mat should be discussed as how road construction affects hazmats which may impacts natural, cultural and human environment resources	Minor/ Suggestion s		Sentence added:Hazardous waste is not a resource that could be affected by the proposed project; rather, it is a potential condition in the environment that could affect natural resources and human health if exposed to air, water, or soil pathways.
NPS	384	Chapter 3	3-14	577	Marcy Okada	Alatna was misspelled.	Factual Error		Corrected.
NPS	385	Chapter 3	3-18	769	Elmer	since road on federal land, does the ADF & G standards meet or beat NOAA standards for fish passage? please clarify.	Minor/ Suggestion		The waterways and fish habitat would be under ADF&G jurisdiction so not sure a response is necessary. No change made.
NPS	386	Chapter 3	3-19	793	Elmer	NPS cannot allow water withdrawal at all proposed sites	Minor/ Suggestion		Comment noted. NPS should provide stipulations to reflect this in the EEA.

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NPS	387	Chapter 3	3-20	835-837	J. Rasic	Alternative A: "since it 835 would be the shortest route, it would have the fewest number of construction camps, maintenance stations, airstrips, vehicle turnouts, and material sites"	Factual Error		For Alt A changed sentence to: Alternatives A and B have the same number of construction camps, maintenance stations, and airstrips. Alternative A would have the least number of vehicle turnouts and material sites.
NPS	388	Chapter 3	3-20	835-837	J. Rasic	This conflicts with lines 877-878: "Alternative B would have the same number of construction camps, maintenance stations, and airstrips as Alternative A."	Factual Error		See comment 387
NPS	389	Chapter 3	3-20	835-837	J. Rasic	Suggest correcting first sentence.	Factual Error		See comment 387
NPS	390	Chapter 3	3-24	1036	Elmer	Do we agree that the wildlife behaviour will not change at the population level with continuous traffic and construction over the next 10 yrs?	Minor/ Suggestion		This appears to be an NPS internal note. The BLM reconsidered the cited text and is comfortable with it. If NPS has further comments, the BLM welcomes them.
NPS	391	Chapter 3	3-32	1355	Elmer	similar to HAZ mats ... NON natives are an issue or impact that is a threat and stressor to natural resources. They are not a NEPA natural resources such as wetlands or rare plants. Is it possible to indent this under vegetation or ecosystems and reference where appropriate in wetlands and rare plants	Minor/ Suggestion		Comment noted. No change to document organization.
NPS	392	Chapter 3	3-35	1521	Marcy	...unaltered present condition prior to construction	Editorial		Concur. Text has been revised.
NPS	393	Chapter 3	3-38	1637	Elmer	confirm that fire suppression is goal in areas without roads at GAAR	Minor/ Suggestion		Fire suppression as a goal within GAAR would be up to the NPS. As such, current statement within EIS already addresses this comment by stating "Suppression efforts on non-federal lands would be determined by the agency with jurisdiction."
NPS	394	Chapter 3	3-39	1681	Elmer	be consistent with organization. Above rare ecosystems is combined with plans	Editorial		As explained in the Rare Plants and Ecosystems (paragraph 2, last three sentences), rare plants are not discussed separately by alternative. As such, Rare Plants is not listed in the subheading within the impact discussion.
NPS	395	Chapter 3	3-39	1684	Elmer	Change in management capacities seems like an o o m issue? The resource impact is a change in fire resiliency to the ecosystem	Minor/ Suggestion		Impacts due to the change in fire resilience to the ecosystem are described earlier in the chapter. This paragraph describes the impacts of wildfire "management" as indicated in the lead-in sentence header.
NPS	396	Chapter 3	3-39	1681-1683	J. Rasic	"Rare Ecosystems. Geothermal springs are noted here. Suggest including mention of the Nutuvukti Fen in GAAR, which could be considered a special ecosystem. I see it is discussed under "Wetlands" but this could be highlighted further as a special ecosystem. Alternative A cuts through this sensitive wetland. Alternative B does not.	Critical/ Disagree		Because the fen is within GAAR, BLM assumes that the primary discussion of the fen will be in the EEA.
NPS	397	Chapter 3	3-42	1812	Elmer	river orders, ? lakes sizes ? chemistry flow temp etc... refer to WQ ? naming them does not describe habitat areas for the fish.	Critical/ Disagree		The text has been updated to add a reference to the water quality section. The level of detail regarding waters in the project area is not available and therefore is not included. The BLM does not believe it would make a substantial difference in decision making.
NPS	398	Chapter 3	3-48	2061	Marcy	... changes in water quality can cause have – delete have	Editorial		Concur. Text has been revised.
NPS	399	Chapter 3	3-48	2067	Marcy	...affect the health- misspelled	Editorial		Concur. Text has been revised.
NPS	400	Chapter 3	3-50	2123	Marcy Okada	Kogoluktik is misspelled – should be Kogoluktuk	Factual Error		Concur. Text has been revised.
NPS	401	Chapter 3	3-50	2136	Marcy Okada	Kogoluktik is misspelled – should be Kogoluktuk	Factual Error		Concur. Text has been revised.
NPS	402	Chapter 3	3-53	2247	Elmer	the impacts are similar for the birds. combine avian affected area and impacts, unless there is a clear rationale as to why they are separated	Minor/ Suggestion		No change. The affected environment section is written to describe the different avian guilds, while the env consequences section combines all birds due to similarities in impacts as the commenter points out.
NPS	403	Chapter 3	3-58	2461	Marcy Okada	Isn't it 42 communities that are within the WAH range?	Factual Error		This comment was on Section 3.3.4, Mammals. SRB&A made an edit in Section 3.3.4 to 42 for consistency with subsistence chapter.
NPS	404	Chapter 3	3-62	2663	Elmer	This is the first time climate change appears as a no action cumulative impact.	Minor/ Suggestion		No change made. Disagree with statement. Climate change is addressed in the Physical environment section, which precedes the section the commenter references.
NPS	405	Chapter 3	3-62	2663	Elmer	Be consistent how climate change is addressed. It is a stressor in all topics. Mention for all topics (all species) or do it globally.	Editorial		Added text regarding climate change impacts in Section 3.1, Introduction.

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NPS	406	Chapter 3	3-66	2854	Elmer	delete last sentence. This EIS is not analyzing non commercial access. If necessary hunting and trapping needs to be housed in subsistence and or visitor experience.	Minor/ Suggestion		No change. Hunting and trapping can be affected without use of the road. Hunting and trapping can affect population sizes, trends, and distributions of wildlife, so this is an appropriate location.
NPS	407	Chapter 3	3-66	2857	Elmer	This is apples to oranges. Birds were analyzed by habitat as surrogate . Why would you analyze small mammals differently at the individual level.	Minor/ Suggestion		No change. Text is acknowledging impacts to individuals in comparison to a lack of impacts at the population level.
NPS	408	Chapter 3	3-66	3857	Elmer	Confirm headers are consistent. Small mammals info			Confirmed. Headers are consistent for small mammals section.
NPS	409	Chapter 3	3-66						No Comment Noted
NPS	410	Chapter 3	3-73	3157	Elmer	The GARR wilderness analysis is not incorporated by mentioning it. Toincorporate provide a sentence or two summarizing and then reference.	Critical/ Disagree		No change. We believe the summary is included at the start of the paragraph.
NPS	411	Chapter 3	3-84	3625	Marcy Okada	and the (write out) Northwest Arctic Borough (NAB)	Editorial		Edited text by adding 'Northwest Arctic Borough (NAB)' at its first use in Section 3.4.1.
NPS	412	Chapter 3	3-93	3996	Marcy Okada	Anaktuvuk Pass is not in the Koyukuk River region	Factual Error	Anaktuvuk Pass (a North Slope region community)	Anaktuvuk Pass (located on the North Slope but included in the Koyukuk River region study community for this project) harvests resources to the north of the project alternatives.
NPS	413	Chapter 3	3-93	4018	Marcy Okada	Anaktuvuk Pass is not in the Koyukuk River region	Factual Error	Anaktuvuk Pass (a North Slope region community)	Subsistence use areas for the Koyukuk River region study communities for this project (Alatna, Allakaket, Anaktuvuk Pass, Bettles, Coldfoot, Evansville, Hughes, Huslia, Wiseman), are focused around the upper and lower Koyukuk River drainages and various tributaries of the Koyukuk River, the upper Kobuk River, and overland areas surrounding the Koyukuk River and into the Brooks Range (Appendix L, Maps 11 through 19).
NPS	414	Chapter 3	3-93	4022	Marcy Okada	Anaktuvuk Pass is not in the Koyukuk River region	Factual Error	Anaktuvuk Pass (a North Slope region community)	Note, SRBA included the Anaktuvik Pass area in the Koyukuk River region for this analysis because it is located at the divide of the Anaktuvik River and John River (tributary of the Koyukuk River) and so was logical to include within the Koyukuk River region for this study. Changed text (see 412 and 413) to clarify.
NPS	415	Chapter 3	3-94	4058	Marcy Okada	Furbearers (e.g., wolf, wolverine, lynx, fox)	Critical/ Disagree	Instead of hare, change to lynx	Concur. Text has been revised.
NPS	416	Chapter 3	3-96	4151	Marcy	and have majority			Concur. Text has been revised.
NPS	417	Chapter 3	3-96	4154	Marcy Okada	most vulnerable to potential impacts to subsistence resource availability	Critical/ Disagree		Concur. Text has been revised.
NPS	418	Chapter 3	3-101	4366	Marcy Okada	Why isn't Kobuk included with Bettles, Evansville, Shungnak, and Ambler?	Critical/ Disagree		No change. Kobuk is included immediately after Ambler.
NPS	419	Chapter 3	3-101	4371	Marcy Okada	Instead of Ambler river drainages, shouldn't it be Kobuk river drainages?	Factual Error		Concur. Text has been revised.
NPS	420	Chapter 3	3-101	4384	Marcy	Experience direct impacts from Alternative B	Editorial		Concur. Text has been revised.
NPS	421	Chapter 3	3-104	4513	Marcy	Alaska Native doesn't have to be plural.	Editorial		Concur. Text has been revised.
NPS	422	Exec summ	e-2	457	Elmer	'would the mine be on state or federal. do we need to clarify this since we are disclaiming current permining possibilities	Minor/ Suggestion		No change made. Mines are on a mix of lands and the ownership is disclosed. Consult map 3-24. We are not "disclaiming current permitting possibilities." There is no mine proposal to consider or permit ripe for consideration.
NPS	423	Exec summ	e-2		Elmer	Clarify Mine are considered cumulative since assumption is that exploration and mining are the purpose of the roads	Editorial		No change made. The text already states mine development..."is evaluated in the EIS as part of indirect and cumulative impacts—that is, impacts induced by construction of the road and added to impacts of the road."
NPS	424	Exec summ	E-4	540	Elmer	NPS doesn't have copy of appendices L & N on subsistence were not reviewed	Minor/ Suggestion		No action required. Links to these appendices were sent to the NPS contact Joe Durrenberger. Morgan Elmer also requested access, which was approved by Tina McMaster-Goering.

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NPS	425	Exec summ	ES-1	398	J. Rasic	DEIS states: "The requested term of the right-of-way (ROW) authorization is 50 years, after which the road would be closed and reclaimed.." AIDEA SF-299 states that this is expected to be 50 years after road construction, but also included the caveat that: "Reclamation is proposed once material exploration and mine operations in the Ambler Mining District are completed and when access to the region is no longer necessary." This opens the door for use of the road to extend indefinitely, or at least beyond 50 years. This should be disclosed to the public. Suggested text: ""The requested term of the initial right-of-way (ROW) authorization is 50 years. The applicant proposes to close the road and undertake reclamation once material exploration and mine operations in the Ambler Mining District are completed and access to the region is no longer necessary."	Critical/ Disagree		Comment noted. No change made to the text at this time.
NPS	426	Exec summ	ES-2	436	J. Rasic	DEIS reads: "Alternative A is AIDEA's proposed alternative..." Replace with "Alternative A is AIDEA's preferred alternative..." (This is AIDEA's wording on the SF-299). Again, the key point is that AIDEA designed and proposed both Alternatives A and B, while stating a preference for A.			see 365
NPS	427	Exec summ	ES-2	441	J. Rasic	DEIS reads: "Alternative B is an alternate route to AIDEA's proposal based on NPS concerns." Replace with: "Alternative B is an alternative corridor proposed by AIDEA that crosses NPS lands in the western (Kobuk River) unit of GAAR." (The point here is that AIDEA designed and proposed both Alternatives A and B, which indicates they are feasible from the perspective of the applicant. ADOT&PF and AIDEA developed and proposed the specific southern/Alternative B route in response to general guidance from NPS to minimize the road footprint on NPS lands and to avoid proximity to large water bodies.	Critical/ Disagree		see 365
NPS	428	Exec summ	ES-2	469	Elmer	clarify existing mines are also cumulative			Existing mining activity is considered part of the past actions considered in the Cumulative Effects analysis in Appendix H.
NPS	429	Exec summ	ES-4	529-530	J. Rasic	DEIS reads: "Recreation and tourism. How would a road impact recreation and tourism in Gates of the Arctic 529 National Park and Preserve, communities, and the surrounding region?"			This section describes scoping issues. The fact is that this was a major scoping issue for the EIS. The public will be looking for an answer to this question. The EIS does not spend a lot of time on the topic within GAAR. The commenter should consult the EEA for more information.
NPS	430	Exec summ	ES-4	529-530	J. Rasic	This is under the heading "Major Issues Evaluated".			See Comment 429
NPS	431	Exec summ	ES-4	529-530	J. Rasic	Consider deleting "Gates of the Arctic National Park and Preserve" given that ANILCA directs the Secretary of Interior to use an EEA to analyze issues on NPS lands and that "Such analysis shall be deemed to satisfy all requirements of [NEPA]." Analyzing impacts on NPS lands in the BLM EIS conflicts with this direction.	Minor/ Suggestion		See Comment 429
NPS	432	Exec summ	ES-4	542-543	Elmer	DEIS reads: "Wilderness values. How would the road impact existing wilderness qualities in Gates of the Arctic 542 National Park and Preserve			See Comment 435. This section describes scoping issues. The fact is that this was a major scoping issue for the EIS. The public will be looking for an answer to this question related to GAAR. The EIS does not spend a lot of time on the topic within GAAR. Primarily we refer the reader to the EEA.
NPS	433	Exec summ	ES-4	542-543	Elmer	in wild and scenic river corridors, and other areas?"			See Comment 435
NPS	434	Exec summ	ES-4	542-543	J. Rasic	Suggested replacement text: ""Wilderness values. How would the road impact wilderness qualities in the surrounding region?"	Editorial		See Comment 435. There is already reference to "other areas."
NPS	435	Exec summ	ES-4	542-543	J. Rasic	Explanation: ANILCA directs the Secretary of Interior to use an EEA to analyze issues on NPS lands and that "Such analysis shall be deemed to satisfy all requirements of [NEPA]." Analyzing impacts on NPS lands in the BLM EIS conflicts with this direction.			The EIS must analyze the entire project. Section 201(4)(d) of ANILCA does not exempt BLM, USACE or the Coast Guard from compliance with NEPA for any aspect of the project. NEPA requires that the entire project (and connected actions) be evaluated.

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NPS	436	Exec summ	ES-4	549-553	J. Rasic	"ANILCA stipulated that the crossing would be exempt from analysis in an EIS but that the National Park Service must complete an Environmental and Economic Analysis (EEA). The function of the EEA is intended to assess resource effects to GAAR as an aid for Department of Interior and U.S. Department of Transportation decision-making regarding the route across the Preserve."			See comment 438
NPS	437	Exec summ	ES-4	549-553		Replace with			See comment 438
NPS	438	Exec summ	ES-4	549-553	J. Rasic	"ANILCA directed that the portion of the road crossing NPS lands be analyzed in an environmental and economic analysis in lieu of an environmental impact statement under NEPA. NPS has worked jointly with USDOT to develop an EEA, which is intended to identify the most desirable route across NPS lands and inform the development of terms and conditions to be included in the NPS right-of-way permit."			Concur. Text has been revised.
NPS	439	Exec summ	ES-4		J. Rasic	DEIS reads: "ANILCA provided for a road across the Kobuk Unit of the GAAR Preserve for access to the District." Replace with "ANILCA stipulated that surface access across the Western (Kobuk River) unit of the Gates of the Arctic National Preserve shall be permitted." ("provided for" is less clear in meaning than "shall permit", which is the wording and intent of ANILCA. The strong wording and clear requirement for NPS and USDOT to permit the road is important to convey.	Critical/Disagree		The text has been changed to quote ANILCA
NPS	440	Exec summ	ES-5	576	Elmer	This contrary to NPS Terms and Conditions of no asbestos materials allowed	Critical/Disagree		Concur. Text has been revised.
NPS	441	Exec summ	ES-5	576	Elmer	Confirm No discontinuous permafrost in alt / Alignments A & B	Factual Error		It is not that there is no discontinuous permafrost with alts A and B, the point being made is that alt C crosses discontinuous permafrost and is in an area where permafrost is closer to the thaw point, making thawing of permafrost more likely with alt C.
NPS	442	Exec summ	ES-5	581	Elmer	using the language BMPs stipulated to minimize impacts indicates terms and conditions.	Minor/Suggestion		Comment noted. No change made.
NPS	443	Exec summ	ES-5	581	Elmer	assuming minimize would BMP include avoid and reduce impacts	Minor/Suggestion		Comment noted. No change made.
NPS	444	Exec summ	ES-5	604-606	J. Rasic	DEIS reads: "the road would essentially create a narrow, hundreds-of-miles no-hunting zone where hunters likely would be unwilling to shoot toward the road."	Critical/Disagree		See comment 445
NPS	445	Exec summ	ES-5	604-606	J. Rasic	Delete this sentence. It has no validity. And to the contrary of a no-hunting zone, the road will promote a greater amount of (both legal and unauthorized) hunting in this area.	Critical/Disagree		Concur. Text has been revised.
NPS	446	Exec summ	ES-6	612	J. Rasic	consider changing alter to degrade. GAAR manages for remote undeveloped.	Editorial		Comment noted. No change made.
NPS	447	Exec summ	ES-6	633	Elmer	delete (likely through an EIS). It is not appropriate to predetermine NEPA pathway	Minor/Suggestion		Deleted
NPS	448	Choose an item.	global		Elmer	'Climate change not a resource but a stressor	Minor/Suggestion		BLM does not consider climate change a resource and does not describe it as a resource. Primarily BLM describes climate change as a reasonably foreseeable action and describes the contributing effects that this "stressor" will have on applicable resources.
NPS	449	Choose an item.	ii	31	J. Rasic	Change: "2.4.5 Alternative B: AIDEA Alternative Route (GAAR South) to the Dalton Highway" to "2.4.5 Alternative B: AIDEA Proposed Alternative Route (GAAR South) to the Dalton Highway" (AIDEA proposed both the north and south alternatives across Gates of the Arctic.)	Editorial		No change made. It is BLM's understanding that AIDEA proposed Alternative A and that the NPS requested they consider a route through the narrower part of the boot. Changing the name of this alternative to "AIDEA Proposed Alternative Route" does not seem entirely accurate. The text already explains BLM's understanding of how AIDEA came to engineer and evaluate Alternative B.
NPS	450	Choose an item.	ii	38	Elmer	'confirm if BLM differences same trend as NPS	Minor/Suggestion		This appears to be internal NPS notes. No change made.
NPS	451	Choose an item.	ii	40	Elmer	'HAZ mat not a resource but a threat	Minor/Suggestion		Sentence added in ch 3: The presence of hazardous wastes in the environment could create a condition that affects project development.
NPS	452	Choose an item.	xii	338	J. Rasic	"PFYS" ... should read "PFYC"?	Editorial		Concur. Text has been revised.

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NPS	453	Chapter 2 & 3			Kyle Joly	'1) Public Access should be considered a reasonably foreseeable scenario and analyzed. I can think of no 200+ mile road in the country that doesn't have public access. Dalton and DMTS both have public access. I don't think BLM's position on this defensible.	Minor/ Suggestion		The explanation of why this is not considered is already described in the EIS in chapters 1 and 2 and in Appendix
NPS	454	Chapter 2 & 3			Kyle Joly	'2) Asbestos. It should not be allowed. Period. There is no mitigation plan except "cap it". How does it get extracted, moved, placed and handled safely prior to capping? Is there any chance capping will be 100% effective forever (hint: no)? Full blown hazmat suits with high-end respirators is not overkill for people working with asbestos, it's required PPE. If asbestos is used, that level of PPE should be provided for any staff or visitors traveling this road. A single strand in the lungs can be lethal.	Critical/ Disagree		From asbestos contractor Robert French: "The idea that a single asbestos fiber can kill you is false. Most people breathe hundreds, if not several thousand asbestos fibers every day. Realizing that completely eliminating exposure to asbestos is not possible, (since it is a naturally occurring mineral), OSHA and EPA regulations have set standards for allowable airborne concentrations of asbestos. OSHA regulations set "Permissible Exposure Limits" for asbestos at 0.1 asbestos fibers per liter of air, for an 8 hour exposure. Because of different breathing rates, that means that asbestos workers are allowed to breathe somewhere between 100,000 and 200,000 asbestos fibers per day. EPA regulations set "Clearance Levels" for asbestos in K-12 schools at 0.01 asbestos fibers per liter of air. That means that our school children would be allowed to breathe between 5,000 and 10,000 asbestos fibers per day (lower breathing rates, and less duration at school)." Simply banning the use of NOA will not protect people from possible exposures to asbestos from existing NOA sources, and may not be reasonable given that NOA materials can be safely used in subgrade applications, or if adequately capped. Mitigation measures have been added in Appendix N under Air Quality.
NPS	455	Chapter 2 & 3			Kyle Joly	'3) Alt C. It is clear that Alt C is an after thought, did not receive as robust study or treatment as the other alternatives and appears to be intentionally drawn to make sure it is longer than the other routes. I think work needs to be done on this Alt to have it be treated equally as A and B.	Minor/ Suggestion		Alternative C was a suggestion made during scoping. It is common for scoping comments to result in alternatives to the applicant's proposed action. It was not drawn to intentionally be longer. The documentation and feasibility and avoidance analysis that resulted in the alignment is described in Appendix G. Avoidance of Conservation System units, significant cultural sites, and engineering terrain were major drivers.
NPS	456	Choose an item.			Kyle Joly	'4) Reclamation bond. The proponent says the road will have a 50 year useful life but there is no reclamation plan that I can find. BLM should require a bond be posted, which they would hold, that would cover the cost of reclamation after the useful life of the project is exceeded. If the road is later decided to remain open, those funds could then be used for mitigation and monitoring efforts by the BLM and NPS.	Minor/ Suggestion		A reclamation plan has not yet been prepared by the applicant, but that is a potential mitigation item. Potential mitigation measures are discussed in Appendix N.
Alatna and Allakaket	652	Executive summary	ES-5	581	Ristroph	"AIDEA has committed to following recently adopted state requirements for use of gravel asbestos-affected gravel." What are these requirements? Is there something more recent and thorough than the 2012 interim guidelines referred to on p. 3-8 (http://www.dot.state.ak.us/stwddes/desmaterials/assets/pdf/asbestos/noa_interim_guidance.pdf)? Appendix N (Mitigation Stipulations) should specifically require adherence to any legal standards or best practices. Further, to the extent allowed under Alaska law, residents must be compensated should any contamination occur as a result of any Ambler Mining District Access Road spills, natural occurring asbestos leachate into the Alatna River, or any other threat to the health and safety of Alatna.	Critical/ Disagree	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	Additional stipulations regarding use of asbestos-affected gravel has been added to Appendix N. The 2012 interim guidance remains the latest.
Alatna and Allakaket	653	Executive Summary	ES-5	606	Ristroph	Communities could <u>possibly</u> benefit from road construction and maintenance jobs, and ultimately from new 606 mining jobs (<u>even though many jobs may be temporary</u>). Benefits depend on whether local residents are trained and qualified for such jobs, and whether workers will be exposed to asbestos-laden gravel that could impact their health.	Editorial	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	The executive summary necessarily gives a high level overview of the EIS. More nuanced discussion appears in Chapter 3.

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Alatna and Allakaket	654	Chapter 1	1-3	92	Ristroph	"The purpose of the <u>proposed</u> BLM action." It is not a requirement that BLM issue the ROW, it is simply proposed.	Editorial	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	BLM has reviewed the Purpose and Need thoroughly. We will take the comment into consideration.
Alatna and Allakaket	655	Chapter 1	1-3	102	Ristroph	"In its review as a cooperating agency, the USACE indicated that its overall purpose is 'to provide year-round surface transportation access for mining exploration and 103 development in the Ambler Mining District.'" This is confusing because there is no statutory mandate suggesting that USACE's purpose is to provide transportation. Rather, USACE has a statutory mandate under Clean Water Act Sec. 404 to protect wetlands, which is why it is involved here. Maybe you need to add language like "to consider whether and how to provide year-round surface transportation access for mining exploration and 103 development in the Ambler Mining District in a manner that complies with statutory obligations to protect wetlands"?	Editorial	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	BLM will discuss this with USACE; it is their Purpose and Need.
Alatna and Allakaket	656	Chapter 1	1-16	216	Ristroph	"resources by recreational hunters and fishers <u>and introducing drugs and alcohol to dry communities.</u> "	Editorial	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	Text has been revised.
Alatna and Allakaket	657	Chapter 2	2-1	1 st para	Ristroph	"evaluate them to determine which were reasonable <u>from the perspective of AIDEA's desired purpose and need.</u> "	Editorial	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	Revised text as suggested with minor modification of the text to indicate "in light of the stated purpose and need" rather than specifically AIDEA's purpose and need.
Alatna and Allakaket	658	Chapter 2	2-47		Ristroph	"AIDEA proposes to reclaim the road and anticipates that would occur at the end of the 50-year ROW authorization, or when mineral exploration and development activities in the District conclude." There is nothing in the body of the EIS explaining how DR&R will take place. We specifically request that Appendix O (Mitigation stipulations) contain strong and clear standards for DR&R. The standards set by a recent BLM EIS (ANWR) are an example of vague and unhelpful standards. Ristroph & Robards have a paper pending publication suggesting DR&R standards, see also New Mexico Admin. Code 19.15.29.13; Government of Northwest Territories, Canada, RECLAIM 7.0 User Manual, Mining Version,(2017).	Critical	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	In Section 2.4.3, the last subheading has been changed from Project Lifespan to Project Lifespan / Closure / Reclamation. Information has been added to the paragraph to indicate generally what closure and reclamation means.
Alatna and Allakaket	659	Chapter 3	3-10	423	Ristroph	"Because the area is remote and little infrastructure exists, the existing capacity for response to spills is limited. While the statewide capacity for oil spill response is well established, there is minimal capacity to handle a spill of liquefied natural gas, or chemicals such as sodium cyanide. Standards for having equipment readily available to clean up spills." We specifically request that Appendix O (Mitigation stipulations) contain strong and clear standards for spill response, including requirements to have equipment for cleaning up spills on hand.	Critical	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	Appendix O will include this. It is a standard mitigation.
Alatna and Allakaket	660	Chapter 3	3-14	514	Ristroph	Altna should be Alatna	Minor/ Suggestion	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	Text has been revised.
Alatna and Allakaket	661	Chapter 3	3-17	716	Ristroph	"although this would could be largely mitigated with properly placed culverts" Based on past activities where culverts did not have the desired results (sometimes because they were too small), this seems a little speculative, which is why we suggest changing WOULD to COULD	Editorial	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	Text has been revised.
Alatna and Allakaket	662	Chapter 3	3-18	780	Ristroph	"The estimated spacing of cross-drainage culverts is every 1,000 feet;" What is the justification for this distance, as opposed to any other distance? If culverts are to be spaced every 1000 feet, and Route B is longer than Route A, then why does Appendix C show fewer culverts for Route B than A?	Critical	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	Text states that the estimated spacing of cross drainage culverts is 1000 ft with some culverts spaced closer if necessary. Appendix C shows that the number of minor culverts (cross drainage) are 2869, 3155, and 4076 for alternatives A, B, and C, respectively.

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Alatna and Allakaket	663	Chapter 3	3-21	886	Ristroph	“Because the total number of culverts would be greater [than Alternative A], Alternative B would be expected to have the greater impacts associated with flow constrictions.” Isn’t the goal of adding culverts to reduce impacts related to flow constructions? How does having more culverts per a given mile of road cause more impacts to hydrology? In other words, it’s not the culverts that are having the impact but the obstructions to flow created by the road, correct? There is a similar discussion on p. 3-46. The text makes the culverts themselves appear to have impacts, rather than the road necessitating culverts, which might lead the reader to think that there shouldn’t be any culverts at all. Maybe you need a statement explaining why culverts are needed.	Critical/ Disagree	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	It is true that the culverts are placed in the roadway embankment to minimize the hydrologic impacts of the embankment as stated under the “Placement of Gravel Fill for Infrastructure” section (Long-term effects of the gravel infrastructure over the life of the roadway include potential changes to the existing hydrologic regime, although this would be largely mitigated with properly placed culverts and bridges at defined waterway crossings and regularly placed cross-drainage culverts.). But culverts themselves have some impacts on the hydrology, such as concentrating or redirecting overland flow to specific cross drainage points or causing local changes in velocity or depth at the entrance and exit of the culvert. These are the impacts that accumulated for each culvert and thus greater impacts for greater numbers of culverts.
Alatna and Allakaket	664	Chapter 3	3-23	961	Ristroph	“Climate change is certain to occur over the life of the project and mine operation, and will impact permafrost and natural drainage patterns.” It would be helpful to have a line after this summarizing the impact, for example, permafrost beneath the road will melt, causing it to cave and become uneven.	Editorial	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	The text has been revised.
Alatna and Allakaket	665	Chapter 3	3-26	1124	Ristroph	“While the relationship between 1124 human caused greenhouse gas (GHG) emissions on climate change may be debated, the 1125 Intergovernmental Panel on Climate Change (IPCC 2007) concluded that “Warming of the climate 1126 system is unequivocal...” and “Most of the observed increase in globally average temperatures since the 1127 mid-20th century is very likely due to the observed increase in anthropogenic (human-caused) greenhouse 1128 gas concentrations.” I don’t think any peer-reviewed scientist would suggest that the effect of GHG emissions is debatable. This science has been around for more than 100 years. I would delete that line. Also, you may want to cite a more recent IPCC report (i.e., 2014 summary for policy makers).	Critical/ Disagree	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	The text has been revised.
Alatna and Allakaket	668	Chapter 3	3-34	1464	Ristroph	For additional discussion on fugitive dust impacts see National Research Council (NRC), Cumulative Environmental Effects of Oil and Gas Activities on Alaska’s North Slope (2003) pages 77, 90	Editorial	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	Citations added to the materials.
Alatna and Allakaket	669	Chapter 3	3-42	End	Ristroph	Allakaket had identified another important salmon area, which was nominated for an Area of Critical Environmental Concern in the Central Yukon planning process. This would be the proposed expanded Jim River ACEC, covering all areas of the Jim R. and S. Fork of Koyukuk R. and surrounding lands, bordered west by Kanuti National Wildlife Refuge (KNWR), east by Dalton Hwy, north by KNWR, Gates of Arctic Nat’l Park, & Chapman Creek, and to a line five miles south of Jim R. You reference this briefly at 3-44, 1895, may want to note it on 3-42.	Critical/ Disagree	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	Text has been revised.
Alatna and Allakaket	670	Chapter 3	3-47		Ristroph	“many of the proposed culverts would not be large enough to adequately pass fish. For example, AIDEA proposes minor culverts at several perennial stream crossings that are assumed to support anadromous fish (Appendix E, Table 17). Based on review of available data, ADF&G would not permit any of the action alternatives as proposed but instead would require additional surveys be conducted at stream crossings, particularly where fish data are lacking, to inform culvert design during permitting.” Given the clear inadequacies of what AIDEA is proposing, we specifically request Appendix O (Mitigation stipulations) to ensure adequate culverts (in terms of size and spacing) will be installed.	Critical	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	All stream crossings will be required to meet ADF&G requirements.

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Alatna and Allakaket	671	Chapter 3	3-49	2093	Ristroph	"Gravel mining near sheefish and other whitefish spawning areas would have especially negative consequences to fish populations, since these fish have specific spawning requirements and large numbers of fish spawn in relatively small, distinct areas." Based on this, we specifically request Appendix O (Mitigation stipulations) to prohibit gravel mining in spawning areas.	Critical	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	State fish habitat regulations and federal EFH requirements govern extraction of gravel from river beds and from floodplains that affect spawning habitat. Compliance with these laws and regulations will be a requirement of any ROW.
Alatna and Allakaket	672	Chapter 3	3-61	End	Ristroph	It may be worth mentioning that black bear is an important subsistence species to Allakaket, and fur-bearing mammals like wolves, wolverines, lynx, and martin are important for trapping.	Editorial	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	Text has been revised.
Alatna and Allakaket	673	Chapter 3	3-71	3.4.1	Ristroph	It would be helpful for this section to have more discussion re what happens when PLOs and ANCSA withdrawals get lifted through Central Yukon and BSWI planning processes and more land goes to the state. This will change the subsistence regime (making it more favorable to outsiders) and may increase mining and development on land that goes into state ownership.	Critical	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	Once a withdrawal is lifted, those lands become available for selection. BLM has no basis to predict when or which lands the State will seek title to.
Alatna and Allakaket	674	Chapter 3	3-72	3105	Ristroph	"RMP, and its boundary is expanding to incorporate the utility corridor. This revision will likely result in the transfer of federally owned land to the State of Alaska."	Editorial	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	BLM considered the suggested revision and decided not to incorporate the change. BLM has revised this sentence. There are alternatives being considered to include in the RMP that would not result in additional transfer of federal lands to state ownership.
Alatna and Allakaket	675	Chapter 3	3-73	3122	Ristroph	This notes that the road crosses areas with Native Allotments. We specifically request that Appendix O (Mitigation Stipulations) contain a provision that Native Allotment will be compensated as a result of any vandalism that may result if access is allowed into the area.	Critical	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	The BLM does not have the authority to stipulate that AIDEA compensate for vandalism at properties due to people trespassing on the road or using the road by permit. Laws already cover trespass on and vandalism of private property. Native Corporations may choose to address that when negotiating easements or land sales to AIDEA
Alatna and Allakaket	676	Chapter 3	3-73	3134	Ristroph	It is possible that the Koyukuk River villages would form a borough prior to road construction in order to generate tax revenue. This should be noted.	Editorial	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	Text has been revised. Footnote added.
Alatna and Allakaket	677	Chapter 3	3-77	3324	Ristroph	"AIDEA has also proposed creating a subsistence working group, which would be charged with identifying crossing locations that could include winter trails or designated RS2477 routes (or potentially other locations) used for subsistence travel." Based on this, we specifically request Appendix O (Mitigation stipulations) to require AIDEA to establish and fund such a working group, which will operate under its own charter, independent of AIDEA.	Critical	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	BLM will take this comment into consideration. This will be addressed to some degree, but BLM needs to determine the extent of authorities.
Alatna and Allakaket	678	Chapter 3	3-86	3709	Ristroph	"aircraft to conduct their work. Some communities, including Allakaket and Alatna, have no local law enforcement officer. Thus, there is little ability for officers to provide a prompt response in the event of an emergency."	Critical/ Disagree	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	Text has been revised.
Alatna and Allakaket	679	Chapter 3	3-87	3731	Ristroph	"all action alternatives would provide increased job opportunities" This is a bit misleading since jobs are generally temporary and there is nothing to ensure local hire, particularly if locals lack the training required for the job. I would change to "all action alternatives could provide some increased job opportunities for residents. Although jobs may be temporary and residents may lack the desired qualifications for such jobs."	Editorial	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	Text has been revised.
Alatna and Allakaket	680	Chapter 3	3-88	3774	Ristroph	"With the proposed project occurring in a census area rather than an organized borough, unless the Koyukuk River villages form a borough, no local government revenues are expected to be generated during road construction or operation."	Editorial	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	Text has been revised.

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Alatna and Allakaket	681	Chapter 3	3-84	3.4.5 Socioeconomics and Communities	Ristroph	Right now it looks like there is no mention of the fact that the communities in the area have, for the most part, exercised their local option to prohibit marijuana and alcohol possession and distribution in the communities (this is otherwise legal in Alaska). There are concerns that a road could facilitate the importation of drugs and alcohol into the communities, which would have health impacts and upset family structures. This is expressed well in the Braun subsistence study, p. 143, which emphasizes potential for more trafficking and the complete lack of any nearby public safety officer.	Critical/ Disagree	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	Information added.
Alatna and Allakaket	682	Chapter 3	3-97	4189	Ristroph	“The potential for impacts to resource availability resulting from hunting or fishing by construction workers is a key concern that has been raised by the study communities.” Perhaps a bigger concern not noted here (though mentioned elsewhere in the document) is the potential for outside hunters to illegally use the road to facilitate their access to subsistence resources that the village residents depend on. This should be mentioned here. You do discuss it as a concern on p. 3-100, but there the reference seems to be to hunters from nearby communities rather than those from urban areas outside the region.	Critical/ Disagree	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	Information added.
Alatna and Allakaket	683	Chapter 3	3-99	4253	Ristroph	“physical barriers to subsistence users. For example, hunters may not be able to cross over a high road on their snowmachines, particularly if they are pulling a heavy load.”	Editorial	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	Text has been revised.
Alatna and Allakaket	684	Chapter 3	3-109	Top	Ristroph	Allakaket and Alatna have been working to document ethnographic resources to establish Traditional Cultural Properties in and near the project area based on contemporary and traditional subsistence use and place names dating back 50 or more years. We request that Appendix O (Mitigation Stipulations) require protection and consultation regarding any future TCPs that may be established in the area.	Critical/ Disagree	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	This should be addressed through the Section 106 programmatic agreement process. No change made in the EIS.
Alatna and Allakaket	685	Chapter 3	3-10	4737	Ristroph	“or partial damage to cultural resources, including subsistence resources that support Alaska Native Village cultures, as”	Editorial	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	Added text in footnote stating that subsistence resources are a type of cultural resources, but that they are addressed in Section 3.4.7 and Appendix L
Alatna and Allakaket	686	Chapter 3	Map 3-24		Ristroph	Isn't there additional state land selected near Dalton Hwy—this is not showing up on the map	Factual Error	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	The state selected lands are from BLM and up to date as of 2019. We assume them to be displaying the correct information.
Alatna and Allakaket	687	Chapter 3	Map 3-26		Ristroph	In 1996 Congress passed Public Law 104-333 (attached - see section 311) which directed the Secretary to withdraw 37,000 acres on the west boundary of the Kanuti National Wildlife Refuge from mineral entry and to designate those lands as the “Lake Totodoten Special Management Area.” The withdrawal was executed through PLO 7372 in 1998. You may want to show this on map	Editorial	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	Added to the figure.
Alatna and Allakaket	688	Appendix C	2		Ristroph	See above comment re # of culverts. Similarly, it appears that the # of bridges for Route C is an order of magnitude greater than for other alternatives. Is that correct? How can Route C have fewer material sites than the other alternatives if Route C is so much longer?	Factual Error	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	Material sites would be wider or deeper under Alternative C to gain the amount of material needed. The total footprint of the material sites is highest for Alternative C.
Alatna and Allakaket	689	Appendix C	7		Ristroph	The number of jobs that will be created by each alternative seems pretty speculative. There should be a footnote explaining how this figure was determined and indicating that not all will be permanent and there is no guarantee of local hire.	Editorial	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	The table cited is a summary table. The explanation for the numbers and the origin table are within the Socioeconomic section of Chapter 3.
Alatna and Allakaket	690	Appendix C	7		Ristroph	For environmental justice, “... would fall disproportionately on low-income and minority populations namely Alaska Native Villages, that live in and near the project area and depend on the surrounding landscape for their subsistence lifeway.”	Editorial	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	Text has been revised.

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Alatna and Allakaket	691	Appendix C	9		Ristroph	On Cultural Resources, should note that there are a number areas not directly within the Area of Potential Effects but nearby that may be eligible for listing on the National Historic Register that may be indirectly affected	Editorial	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	Information added.
Alatna and Allakaket	692	Appendix E	15		Ristroph	What is the significance of the boldfaced fish names, are these the ones that are key?	Minor/ Suggestion	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	b Species shown in bold (strong text) and followed with a superscript of 'b' are major targets of a subsistence, sport, or commercial fishery in the study area; have specialized habitat (e.g., spawning area) in the study area that is limited elsewhere; or have EFH designated in the study area and are considered key to this analysis.
Alatna and Allakaket	693	Appendix E	22		Ristroph	Table 21 is helpful and I'm wondering if there should be something similar for bird and fish habitat, as this just covers mammals. Also, is it possible that the asbestos could have impacts on non-human animal species?	Editorial	Remarks / How Resolved (Reviewers: please provide your recommendation or resolution for the comment)	Discussed with BLM - consider for doing this between draft and final (adverse/beneficial is generally to be avoided - delete column)
Alatna and Allakaket	694	Appendix F	1		Ristroph	Should Table 2 also refer to Jim River ACEC and its proposed expansion under Central Yukon Plan? And Lake Todatonten Special Management Area	Editorial	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	These areas are not affected by any alternative so do not appear in the table.
Alatna and Allakaket	695	Appendix F	9		Ristroph	Alatna is clearly an environmental justice community (all Kobuk Inupiat living there) but is erroneously listed as "NA" for information not available. Rampart and Tanana are also Alaska Native Villages and should be listed as "yes"	Factual Error	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	The table identifies Alatna, Rampart, and Tanana as associated with Alaska Native tribes and recognizes them as EJ communities based on minority population. Sufficient data related to income for Alatna and Rampart are not available to identify them as low-income populations. Identification as an EJ community is not dependent on both minority and low-income metrics; rather, a community can be EJ based on minority OR low-income metrics.
Alatna and Allakaket	696	Appendix G	5	3 rd para	Ristroph	"The purpose of the BLM action is to <u>consider whether and how to</u> issue a right-of-way grant which provides for."	Editorial	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	The report as written reflects the purpose as written at the time of the Alternatives Development report drafting. See Chapter 1 of the EIS for the revised Purpose and Need Statement.
Alatna and Allakaket	697	Appendix G	20	Top of section 5.4	Ristroph	These were not really based on the recommendations of Allakaket/Alatna, who favored a road route through the Northwest Arctic Borough, which may stand to benefit more from the road and mining than those more easterly, and would be in a better position to mitigate some impacts/cost. I feel like there ought to be a disclaimer that this was based on many but not all recommendations, and the assumption that the northwest port would be frozen in winter, which it may or may not be. Overall, given the opposition the DEIS is likely to face, it would behoove you to have stronger justification for rejecting the western routes and those involving rail, barge, and ice. You would want to show how much more environmentally damaging these are and how uneconomical these are, if that is truly the case.	Editorial	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	The development and screening of alternatives was completed on many factors which are documented in the report. This report reflects a snapshot in time. BLM developed the report with input from cooperating agencies. BLM is comfortable with the decision made based on the report and input from the agencies. Because the western alternatives are not reasonable they were not carried forward in the EIS for detailed evaluation. Clarifying information has been added to the report.
Alatna and Allakaket	698	Appendix G	24	Top of s. 6.4	Ristroph	" <u>Some</u> Agencies felt that a "year-round" requirement"	Factual Error	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	Text has been revised.
Alatna and Allakaket	699	Appendix H	H-24	S 2.2.1	Ristroph	This section on public access could use more detail. I know BLM is not opening it to access, but it ought to be considered how people (especially on snowmachine or ATV) will bypass the staffed gate facility. These people could include hunters or small miners (with or without permits)	Editorial	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	2.2.1 is part of the description of what is proposed as it pertains to indirect and cumulative impacts. Subsections on direct impacts in Section 3 of the main body of the EIS address potential for unauthorized people using the road. The potential for trespass is acknowledged in several pertinent sections throughout the EIS.
Alatna and Allakaket	700	Appendix H	H-27	s. 2.2.2	Ristroph	Perhaps there should be a section after this analyzing the potential for having local subsistence residents use the road?	Editorial	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	Authorized use of the road by the general public, including local subsistence residents, is not part of AIDEA's proposal. Therefore, it is not analyzed. BLM has determined that use of the road by the general public (which includes local residents) would not be safe and it would be prohibited. See more in Chapter 2.

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Alatna and Allakaket	701	Appendix H	H-61	Table 3-6	Ristroph	Table on tolls seems highly speculative. Body of EIS says nothing about how many toll booths there are, what tolls are, so it is hard for the reader to accept a general UAA citation asserting that a certain amount of toll revenue is forthcoming without any more detail	Editorial	Please note: suggested deletions to quoted text are in bold-and-cross-out , suggested additions are <u>underlined</u>	It is likely that the road would not operate as a "toll facility" in the conventional sense. Mining companies would pay a use fee to AIDEA, under a negotiated use agreement. There would not be toll booths.
Alatna and Allakaket	702	Appendix H	H-65	2529	Ristroph	Another exception may be importation of drugs and alcohol. Having the road not go all the way to a community like Allakaket or Alatna means that it is not economically worthwhile to drive foods and other goods to the road endpoint and go the rest of the way by snowmachine. The economics are different for drugs that may be easier to carry in and worth the price.	Critical	Please note: suggested deletions to quoted text are in bold-and-cross-out , suggested additions are <u>underlined</u>	The HIA discusses the potential for importation of drugs and alcohol in greater detail. See Appendix N.
Alatna and Allakaket	703	Appendix H	H-69	2741	Ristroph	It is reasonably foreseeable that in the future the road will become public. Yes, this will require a separate EIS, but since the current EIS is focusing on cumulative impacts, including the impacts of mines that will require separate EISs, you should not lose sight of the effects of a permanent public road. This will almost certainly reduce subsistence opportunities for roaded communities, akin to the study by Guettabi et al. 2016. At least a paragraph focusing on the potential for the road to become public and better yet, a small section should be added on what would happen if/when the road becomes public.	Critical	Please note: suggested deletions to quoted text are in bold-and-cross-out , suggested additions are <u>underlined</u>	BLM does not consider the road becoming public as reasonably foreseeable, for multiple reasons described in Chapter 2 and Appendix G. Appendix L does discuss the potential for the road to change reliance on subsistence and Appendix N discusses the health related effects of that potential change.
Alatna and Allakaket	704	Appendix H	H-71	3.5.9	Ristroph	Should explain that cultural resources are not just past archeological sites but also sites where subsistence takes place. Any impacts to subsistence affects such cultural resources.	Editorial	Please note: suggested deletions to quoted text are in bold-and-cross-out , suggested additions are <u>underlined</u>	Added a definition of cultural resources to this section to address the comment.
Alatna and Allakaket	705	Appendix H	H-90		Ristroph	I noticed that the citation to Annette Watson is missing from the reference section. It may be helpful for someone to go through each citation in the text and make sure it is included in the reference section.	Minor suggestion	Please note: suggested deletions to quoted text are in bold-and-cross-out , suggested additions are <u>underlined</u>	Watson 2014 and 2018 added to references; citations in text have been checked against references in document (Adair)
Alatna and Allakaket	706	Appendix J	1	124	Ristroph	"the BLM is analyzing 3 action alternatives in the EIS and one no-action alternative."	Minor suggestion	Please note: suggested deletions to quoted text are in bold-and-cross-out , suggested additions are <u>underlined</u>	No Action Alternative text added to draft PA. Comments provided to BLM for review in the Section 106 process.
Alatna and Allakaket	707	Appendix J	3	171	Ristroph	"effect on historic <u>and culturally significant</u> properties"	Minor suggestion	Please note: suggested deletions to quoted text are in bold-and-cross-out , suggested additions are <u>underlined</u>	Comments provided to BLM for review in the Section 106 process.
Alatna and Allakaket	708	Appendix J	3	177	Ristroph	"for NRHP eligibility; and there may be additional properties that are cultural resources that have not been evaluated for eligibility for NRHP or other listings"	Editorial	Please note: suggested deletions to quoted text are in bold-and-cross-out , suggested additions are <u>underlined</u>	Comments provided to BLM for review in the Section 106 process.
Alatna and Allakaket	709	Appendix J	5	289	Ristroph	Shouldn't there be a requirement for the Permittee to consult with nearby villages regarding potential historical or cultural resources prior to conducting an earth-moving activity?	Critical	Please note: suggested deletions to quoted text are in bold-and-cross-out , suggested additions are <u>underlined</u>	Comments provided to BLM for review in the Section 106 process.
Alatna and Allakaket	710	Appendix J	6	311	Ristroph	"historic <u>and cultural</u> properties"	Minor suggestion	Please note: suggested deletions to quoted text are in bold-and-cross-out , suggested additions are <u>underlined</u>	Comments provided to BLM for review in the Section 106 process.
Alatna and Allakaket	711	Appendix J	14	669	Ristroph	Some materials collected could belong to tribe under NAGPRA.	Factual error	Please note: suggested deletions to quoted text are in bold-and-cross-out , suggested additions are <u>underlined</u>	Comments provided to BLM for review in the Section 106 process.
Alatna and Allakaket	712	Appendix J	15	675	Ristroph	Only materials collected to which tribes have no rights should go to museum	Critical	Please note: suggested deletions to quoted text are in bold-and-cross-out , suggested additions are <u>underlined</u>	Comments provided to BLM for review in the Section 106 process.

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Alatna and Allakaket	713	Appendix N	x	402	Ristroph	"NOA materials can be safely handled and managed; however, this requires a significant effort and careful development of detailed management plans." Mitigation stipulation should be that plan is required and reviewed in a peer-review format by independent health experts not affiliated with state or AIDEA.	Critical	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	BLM: In the Plan of Development, BLM will require a plan for handling asbestos material. BLM has experts who will review the plan. Note, BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.
Alatna and Allakaket	714	Appendix N	15	837	Ristroph	"The higher per capita income in the NAB is influenced by employment at the Red Dog Mine and the NAB and Maniliq, Inc.."	Minor suggestion	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	Text has been revised. Note, BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.
Alatna and Allakaket	715	Appendix N	111		Ristroph	Maybe you explained it earlier but can you reiterate here how points are assigned (i.e. on scale of 1-10 with 10 meaning worst impacts). The tables are hard to read because some effects that seem like they would be good (decreased food costs) seem to be evaluated in the same way as bad effects	Editorial	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	Per BLM, impacts are not categorized as bad or good but simply impacts. Note, BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.
Alatna and Allakaket	716	Appendix N	115	3189	Ristroph	"Decrease in morbidity and mortality rates due to improvements in access, quantity and quality of water and sanitation facilities (improved income (employment) and village finances" I'm not sure how the road will have a significant impact on this as the communities without plumbing in their homes are not going to be added to the road system	Editorial	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	No change required. Text explains that increased income due to the project at either an individual, household and/or Native Corporation level could result in increased expenditure on WATSAN. Note, BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.
Alatna and Allakaket	717	Appendix N	126	Table 64.	Ristroph	Some of the recommendations here are beyond the scope of what BLM can implement since they will need to be implemented by mining companies. But this table is an excellent start for developing mitigation stipulations for this EIS for anything within AIDEA's power, including those that relate to the road workforce, asbestos, and emergency transport between villages	Critical	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	Agree, no text change required. Note, BLM has decided not to include the HIA as an appendix but has summarized relevant impact information within the EIS.
Alatna and Allakaket	718	Subsistence study	52		Ristroph	Are these tables right? This section is supposed to be Koyukuk and it is referring to NAB villages	Editorial	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	The section is for the Kobuk River, not the Koyukuk River region, and includes communities located along the Kobuk River (Ambler, Kiana, Kobuk, Noorvik, and Shungnak). Koyukuk River study communities are addressed farther down in the document. In some cases tables may appear after a new section has started due to pagination.
Alatna and Allakaket	719	Subsistence study	118		Ristroph	The categories for discussing impacts appear to be limited to those discussed in the context of ANILCA 810 (abundance, availability, and access). What about impacts to food security, and traditional knowledge and culture associated with subsistence lifeway? These are briefly mentioned at the top of page 119 but probably merit more consideration, at least one short section at the end common to all impacts	Critical	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	Impacts not related to abundance, availability, and access are discussed under "Other Indirect and Cumulative Impacts." The last paragraph of that section focuses on broader impacts to culture, including traditional knowledge associated with traditional areas. A section has been added under "Impacts common to All Alternatives" to specifically address impacts related to traditional knowledge and cultural/social aspects. Impacts to food security are discussed in the HIA.
Alatna and Allakaket	720	Subsistence study	122		Ristroph	You may want to double check the basis for different reliance and subsistence areas for Alatna v. Allakaket as the areas and reliance are similar, even if Alatna, based on its small size, is not on WACH working group	Factual error	Please note: suggested deletions to quoted text are in bold and cross-out , suggested additions are <u>underlined</u>	Need additional clarification from commenter regarding which statements they are referring to. Page 122 is in the Yukon River section and therefore unclear what the comment is referring to. In regards to treatment of Alatna and Allakaket, the two communities' use areas are described alongside one another. Text has been added to acknowledge Alatna's use of the WACH despite their not being members of the WAHWG.